CONSTRUCTION NEWS

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CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

(denotes that this work is advertised in Engineering News.)*

The following Plans (P.) and Specifications (S.) are on file and may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York.

Bids close.	Work. Place.		See issue.
3-27*	Navigation pass, Wheeling, W. Va.	(P. & S.)	3- 5
3-28*	Hydrotherapeutic equipment, Hot Springs, S. Dak.	(S.)	3- 5
3-28	Sawmill, etc., New Orleans, La.	(S.)	3- 5
3-28	Boilers, etc., Bremerton, Wash.	(S.)	2-27
3-31*	Cement, Wheeling, W. Va.	(S.)	3- 5
3-31*	Breakwater, Hawaii, T. H.	(P. & S.)	2-13
4- 1*	Dredging, New London, Conn.	(S.)	3- 5
4- 1*	Canal, Klamath Falls, Ore.	(S.)	2-13
4- 1	Reservoir, Atlanta, Ga.	(P. & S.)	3-19
4- 2*	Sewer, Louisville, Ky.	(P. & S.)	3-19
4- 7*	Navigation pass, Wheeling, W. Va.	(S.)	3-12
4- 9	Ledge rock removal, Newport, R. I.	(S.)	3-26
4-15*	Dam, Portland, Ore.	(S.)	2-27
5- 1	Floating crane, Quebec, Que.	(S.)	2-20
5- 1*	Reduction works, Columbus, Ohio	(S.)	3- 5

LIST OF CONTRACTS PENDING.

LIGHT, HEAT AND POWER PLANTS.

3-28	Boilers stack, etc., Bremerton, Wash.	2-27
3-30	Elec. equipment, New York	3-19
3-31	Lighting system, Roanoke, Va.	3-19
3-31	Lighting, Roanoke, Va.	3-19
3-31	Supplies, Wash., D. C.	3-19
3-31	Lighting, Wilmington, Del.	3- 5
4- 1	Lighting, Mount Vernon, Ind.	2-13
4- 1	Elec. supplies, Ottawa, Ont.	3-26
4- 1	Gas fixtures, New York, N. Y.	3-26
4- 6	Lighting fixtures, New York	3-26
4- 6	Elec. equipment, New York	3-26
4- 6	Extending plant, Moose Jaw, Sask.	3-26
4- 6	Elec. supplies, Wash., D. C.	2-20
4- 7	Electric plant, Lecompte, La.	2-13
4- 7	Light plant, Fort Worth, Tex.	3-12
4-11	Conduit, etc., Bessemer, Ala.	3-12
4-11	Conduits, etc., Portsmouth, Va.	3-12

BRIDGES.

3-26	Bridges, Frankfort, Ind.	3-26
3-27	Bridge, Winnipeg, Man.	3-26
3-27	Culverts, etc., Independence, Mo.	3-19
3-27	Superstructure, Milwaukee, Wis.	3-12
3-28	Culvert, Cleveland, Ohio	3-12
3-28	Bridge, Loramie, Ohio	3-26
3-28	Bridges, Washington, C. H., O.	3-26
3-30	Bridge, Elyria, Ohio	3-26
3-30	Superstructure, Newark, Ohio	3-12
3-30	Bridges, South Bend, Ind.	3-19
3-31	Steel bridge, French Lake, Minn.	3-12
3-31	Bridge, etc., Buffalo, Minn.	3-12
3-31	Bridge plank, Watertown, Minn.	2- 6
4- 2	Bridge, Somerset, Pa.	3-26
4- 3	Bridges, Copperhill, Tenn.	3-19
4- 3	Steel bridges, Denton, Tenn.	3-26
4- 3	Bridge, Silt, Colo.	3-26
4- 4*	Bridge work, Salem, N. J.	3-19
4- 6	Steel bridge, St. Paul, Minn.	3-12
4- 6	Draw-bridge, Cathlamet, Wash.	3-12
4- 6	Bridges, Scranton, Miss.	3-26
4- 6	Steel bridge, Auburn, Cal.	3-26
4- 6	Bridge, Connell, Wash.	3-26
4- 7	Bridge, Chehalis, Wash.	3-26
4- 7	Piers, etc., Cincinnati, Ohio	3-26
4- 7	Bridges, Crawfordsville, Ind.	3-19
4- 7	Bridges, Valparaiso, Ind.	3-19
4- 7	Bridge, Kenmore, Ohio	3-19
4- 7	Bridges, La Moure, N. Dak.	3-19
4- 8	Steel bridges, Birmingham, Ala.	3-19
4- 8	Bridge, Brookings, S. Dak.	3-12
4- 9	Wooden bridge, Vicksburg, Miss.	3-26
4-10	Bridges, Fort Meade, S. Dak.	3-19
4-11	Steel bridges, Hamburg, Ark.	3-26
4-20	Substructure, Zanesville, Ohio	3-26

BUILDINGS.

3-27	Building materials, New York	3-19
3-28	Sawmill, etc. (Mfg. Pl.), New Orleans, La.	2-27
3-28	Library, St. Helena, Mont.	3-26
3-30	Repairs, etc., New York, N. Y.	3-19
3-30	Heating, etc., New York, N. Y.	3-19
3-30	Buildings, Syracuse, N. Y.	3-19
3-30	Factory, etc., Stillwater, Minn. (Mfg. Pl.)	3-19
4- 1	City hall, Roanoke, Va.	3-19
4- 1*	Heating, etc., Erie, Pa.	2-27
4- 1	Hospital, Ft. Lincoln, N. Dak.	3- 5
4- 1	Building, Lincoln, Neb.	3-12
4- 1	Plans, Greensburg, Pa.	3-26
4- 2*	Plumbing, etc., Los Angeles, Cal.	2-20
4- 4	Post-office, Corning, N. Y.	2-27
4- 4	Alterations, Chicago, Ill.	3-26
4- 5	Building, Columbus, Ohio	3-19
4- 6	School, Cleveland, Ohio	3-26
4- 6	Heating, etc., New York, N. Y.	3-26
4- 7*	Post-office, Nevada, Mo.	2-27
4- 7	Masonry, etc., Madison, Wis.	3-12
4- 8	Elevators, Wash., D. C.	3-12
4- 8	Building, Elkins, W. Va.	2-13
4- 8	Post-office, Portsmouth, Va.	3- 5
4- 8*	Building, etc., Rochester, N. Y.	3-19
4- 8*	Elevators, Wash., D. C.	3-19
4- 8*	Panel boards, Wash., D. C.	3-26
4- 9	Post-office, Dixon, Ill.	3- 5
4- 9*	Heating, Tyler, Tex.	3- 5
4-10*	Post-office, Jackson, Miss.	3- 5
4-11*	Post-office, Bessemer, Ala.	3- 5
4-14	Post-office, Tacoma, Wash.	2-27
4-14	Hospital, Columbus, Ohio	3-26
4-15*	Buildings, Ft. D. A. Russell, Wyo.	3-26
4-15	Post-office, Ithaca, N. Y.	3-12
4-20*	Heating, Green Bay, Wis.	3-26
4-23	Heating etc., Spokane, Wash.	3-19
4-28	Post-office, Watertown, S. Dak.	3-19
4-28*	Post-office, Crookston, Minn.	3-19
5- 4*	Post-office, Bar Harbor, Me.	3-26
5- 4*	Buildings, etc., San Francisco, Cal.	3-26

WATER-WORKS.

3-27	Drain, Spokane, Wash.	3-19
3-27	W.-Works, Elwood, Neb.	3-26
3-30	Water meters, Victoria, B. C.	3-26
3-30	Engines, Chicago, Ill.	3-26
3-30	Water tower, Stillwater, Minn.	3-19
3-30*	W.-Works material, McGrawville, N. Y.	3-12
4- 1	Pumping station, Montezuma, Ga.	3- 5
4- 1	Reservoir, Atlanta, Ga.	3-12
4- 1	Water mains, New York, N. Y.	3-26
4- 1	Water pipe, Elsinore, Utah	3-26
4- 2*	Cast-iron pipe, Cincinnati, Ohio	3-26
4- 2*	Pumping station, etc., Grand Rapids, Mich.	3-12
4- 2*	Dam, Berwick, Pa.	3-19
4- 4*	Water-works, Staatsburgh, N. Y.	3-26
4- 7*	Cast-iron pipe, Oswego, N. Y.	3-26
4- 7	Pipe, Springfield, Mo.	3-26
4- 8*	Intake crib, etc., Oswego, N. Y.	3-26
4-10*	Intake pier, Quindaro, Kan.	3-19
4-10*	Pipe, Holyoke, Mass.	3-26
4-14	W.-Works, Maxton, N. C.	3-12
4-14*	Special castings, etc., Oswego, N. Y.	3-26
4-17*	Pumping engine, White Plains, N. Y.	3-26
4-28	Pipe system, Malta, Ohio	3-26
5-18*	Water-works plant, Council Bluffs, Iowa	3-19

SEWERS.

3-27	Sewers, etc., Remsen, Iowa	3-19
3-27	Sewer, Duluth, Minn.	3-26
3-30	Sewer, Erie, Pa.	3-26
3-30	Sewer system, Tifton, Ga.	3-19
3-30	Sewers, etc., New York, N. Y.	3-19
3-30*	Sewers, St. Marys, Pa.	2-20
3-31*	Sewers, Fort Morgan, Colo.	3-12
3-31*	Sewer, West Hartford, Conn.	3-19
3-31	Sewers, Buffalo, N. Y.	3-26
4- 1	Sewers, Lancaster, Ohio	3-26
4- 1	Storm sewer, Oakland, Cal.	3-19
4- 1	Sewer pipe, Grand Island, Neb.	3-19
4- 2*	Sewer, Louisville, Ky.	3-12
4- 2	Sewers, Port Clinton, Ohio	3- 5
4- 3	Sewer system, Holdrege, Neb.	3- 5
4- 3	Sewer, St. Louis, Mo.	3-26
4- 3	Pipe sewers, Waukesha, Wis.	3-26
4- 6	Sewer, Wichita, Kan.	3-26
4- 6	Sewer, Fargo, N. Dak.	3-26
4- 6	Pipe sewers, Moberly, Mo.	3-12
4- 6	Sewers, Lawrence, Kan.	3-19
4- 7	Sewer, La Mars, Iowa	3-19
4- 9*	Sewer, Grand Rapids, Mich.	3-19
4- 9*	Sewer, Lake Placid, N. Y.	3-26
4- 9	Sewer system, Canton, Miss.	3-19
4-15	Sewer system, Fort Slocum, N. Y.	3-19
4-15	Sewer, Alamosa, Colo.	3-26

STREETS AND ROADS.

3-27	Roads, Harrisburg, Pa.	3-12
3-27	Road improvement, Cincinnati O.	3-12
3-27	Brick pavement, etc., Valparaiso, Ind.	3-12
3-27	Wood blocks, Minneapolis, Minn.	3-19
3-27	Macadam, Jacksonville, Fla.	3-26
3-28	Paving, etc., Lincoln, Neb.	3-26
3-28	Grading, etc., Woodruff Place, Ind.	3-19
3-30	Paving, Asbury Park, N. J.	3-19
3-30	Grading, etc., Minneapolis, Minn.	3-19
3-30*	Roads, Fort Morgan, Ala.	3- 5
3-30	Highway improvement, Pylesville, Md.	3-26
3-31	Grading, etc., Avalon, Pa.	3-26
3-31	Gravel road, Fort Benjamin Harrison, Ind.	3-12
3-31	Paving, Augusta, Ga.	3-12
3-31	Sidewalks, Opelousas, La.	3-19
4- 1*	Roads, etc., Fort Wood, N. Y.	2- 6
4- 1	Grading, La Salle, Ill.	3-26
4- 1	Repaving, Buffalo, N. Y.	3-26
4- 2	Macadam, Grand Rapids, Mich.	3-26
4- 2	Road, Washington, Pa.	3-26
4- 2	Pavement, Oak Park, Ill.	3-26
4- 2	Grading, etc., Cleveland, Ohio	3-26
4- 2*	Road, Phillipsburg, N. J.	3-12
4- 2	Grading, etc., Rushville, Ind.	3-12
4- 2	Sods, New York, N. Y.	3-19
4- 3	Pike reconstruction, Somerset Pa.	3-19
4- 3	Road, Harrisburg, Pa.	3-19
4- 3	Cement sidewalks, Salt Lake City, Utah	3-26
4- 3	Macadam, West Milton, Ohio	3-26
4- 3	Grading, Hazeldell, Pa.	3-26
4- 4	Pavements, etc., Washington, D.C.	3-26
4- 4	Stone roads, Ramsey, N. J.	3-19
4- 4	Street improvement, Richmond, Ohio	3-19
4- 6	Gravel roads, Columbus, Ind.	3-19
4- 6	Road, Lawrenceburg, Ind.	3-19
4- 6	Gravel road, Hartford City, Ind.	3-19
4- 6	Roads, Knox, Ind.	3-19
4- 6	Road, Richmond, Ind.	3-12
4- 6	Road, Vernon, Ind.	3-12
4- 6	Gravel roads, Delphi, Ind.	3-26
4- 6*	Pavement, Petersburg, Va.	3-26
4- 6	Macadam, Prescott, Ariz.	3-26
4- 6	Sidewalks, Devils Lake, N. Dak.	3-26
4- 7	Gravel roads, Washington, Ind.	3-26
4- 7	Road, Jasper, Ind.	3-12
4- 7	Gravel road, Vincennes, Ind.	3-12
4- 7	Broken stone, Bloomfield, N. J.	3-19
4- 7	Gravel roads, Martinsville, Ind.	3-19
4- 8	Sidewalks, Brooklyn, N. Y.	3-26
4- 9	Trap rock, etc., Brooklyn, N. Y.	3-26
4-10	Grading, etc., Sweetwater, Tenn.	3-26
4-13	Paving, Reno, Nev.	3-26
4-13*	Stone road, Freehold, N. J.	3-26
4-13	Cement, Panama	3-12
4-14*	Street repair, Peoria, Ill.	3-26
4-16	Roads, Washington, Pa.	3-26
4-20	Grading, etc., Ashland, Ohio	3-26
5- 1*	Paving, San Salvador, Salvador, C. A.	3-12

MISCELLANEOUS.

3-27*	Navigation pass, Wheeling, W. Va.	2-27
3-28*	Hydrotherapeutic equipment, Hot Springs, S. Dak.	3- 5
3-28*	Keepers' dwelling, Tompkinsville, N. Y.	3- 5
3-28	Bulkhead, Newport, Ore.	3-26
3-30	Retaining wall, Toledo, Ohio	3-26
3-30	Hose, Hartford, Conn.	3-26
3-30	Buoys, Detroit, Mich.	3-26
3-30	Engineering supplies, Panama	3-12
3-30	Fire extinguishers, New York	3-19
3-30	Bicycles, New York, N. Y.	3-19
3-31*	Cement, Wheeling, W. Va.	3- 5
3-31*	Breakwater, Hawaii, T. H.	2-13
3-31	Supplies, Des Moines, Iowa	3-12
4- 1*	Dock, wharf, New York, N. Y.	2-20
4- 1*	Dredging, New London, Conn.	3- 5
4- 1	Cement, Galt, Ont.	3-19
4- 1	Rope, etc., New York, N. Y.	3-26
4- 1	Canal, Klamath Falls, Ore.	3-26
4- 2	Repairing, New York, N. Y.	3-26
4- 2	Connecting tunnel, New York	3-26
4- 2	Repairing steamboat, New York	3-26
4- 3	Steel rails, Panama	3-26
4- 3	Hose, New York, N. Y.	3-26
4- 6	Ambulance, Hartford, Conn.	3-26
4- 6	Mooring stones, Portland, Me.	3-26
4- 6*	Light-house, etc., Wilmington, Del.	3-19
4- 6*	Dredge machinery, Cincinnati, O.	3- 5
4- 6*	Dredging, dredging plant, Duluth, Minn.	3-12
4- 7*	Machinery repairs, Tompkinsville, N. Y.	3-12
4- 7*	Navigation pass, Wheeling, W. Va.	3-12
4- 7*	Dredging, New York, N. Y.	3-12
4- 7	Wooden pier, Rye, N. Y.	3-26
4- 7	Ditches, Pocahontas, Iowa	3-26
4- 7	Drain, Rockwell City, Iowa	3-26
4- 9*	Ledge rock removal, Newport, R. I.	3-12
4- 9	Steel plate, Duluth, Minn.	3-19
4-10*	Dredging, New York	3-12
4-10	Wire fence, Edmonton, Alta.	3-26
4-10	Drainage ditches, Fort Meade, S. Dak.	3-26
4-11*	Metal work, Wilmington, Del.	3-26
4-13	Cement, Panama	3-12
4-15	Dam, etc., Portland, Ore.	3-26
4-17*	Breakwater, Boston, Mass.	3-19
4-17*	Dredging, Detroit, Mich.	3-19
4-17	Tow boats, Cincinnati, Ohio	3-26
4-20*	Pier, dredging, Milwaukee, Wis.	3-26
4-21	Barge canal, Albany, N. Y.	3-26
4-23*	Monument, Charleston, S. C.	3-26
4-24	Breakwater, Toronto, Ont.	3-26
4-28*	Rock removal, New York	3-19
5- 1*	Concrete sea-wall, Key West, Fla.	3-26
5- 1	Floating crane, Quebec, Que.	2-20
5- 4*	Sea wall, wharves, San Francisco, Cal.	3-19
5-11*	Reduction works, Columbus, O.	2-20

FOREIGN.

3-30	Cable laying, Spain	3-19
3-31	Railway hotel, Cape Colony	1-30
4- 1	Elec. railway, lighting, Brazil	3-19
4- 2	Telephone system, Spain	3-19
4-10	Bridge, Netherlands	3-19
4-13	Cement, Egypt	3-19
4-14	Laying cables, Australia	3-19
4-25	Dredger, Argentina	2-13
5- 1	Elec. railway, Argentina	11-21
5- 6	Ry. concession, Spain	3-19
5-26	'Phone material, Australia	2-13

CIVIL SERVICE.

3-30	Meter inspector, New York, N. Y.	3-19
4- 1	Micro-analyst, Washington, D. C.	3-19
4- 1	Supt. road construction, Washington, D. C.	3-19
4- 8	Arch. Steel Draftsman, Tompkinsville, N. Y.	3-26
4- 8	Marine steam engineer, Seattle, Wash.	3-26
4-15	Engineer, Arizona	3-26
4-15	Scientific asst., Wash., D. C.	3-26
4-15	Junior engineer, Wash., D. C.	3-26
4-15	Asst. engineer, Wash., D. C.	3-26
4-18	Conduit inspector, Albany, N. Y.	3-26
4-18	Mech. engineer, Albany, N. Y.	3-26
4-18	Asst. chief engr., Albany, N. Y.	3-26
4-18	Asst. C. E., Albany, N. Y.	3-26
4-18	C. E. draftsman, Albany, N. Y.	3-26
4-22	Grain standardization assistant, Washington, D. C.	3-26
4-29	Magnetic Observer, Wash., D. C.	3-26
4-29	Blacksmith, Browning, Mont.	3-26
5- 6	Apprentice, Wash., D. C.	3-26

RAILWAYS.

(denotes that this work is advertised in Engineering News.)*

BIENVILLE & QUITMAN.—This company has filed its charter at Shreveport, La., to build a line of about twelve miles long, connecting the points named in its title. The incorporators and directors are D. C. Richardson, Pres.; W. F. Taylor, Vice-Pres.; C. R. Lawhon, Secy.-Treas.; J. D. Chipman and J. D. Batchelor. The D. C. Richardson-Taylor Lumber Co., of Bienville, La., is said to be interested. Capital, $100,000.

CAIRO & NORFOLK.—Incorporated in Kentucky, with a capital stock of $500,000. The incorporators are L. W. Goode and E. E. Weston, of New York, and M. W. Kelly, of Madison, Wis.; W. A. Usher, R. E. Lockridge, B. A. Neal, H. C. Neal, E. S. Beaumont, Arthur E. Thomas, F. R. Allen and C. B. Goode, residents of Mayfield, Ky. The road will extend from Fort Jefferson, in Ballard County, on the Mississippi River, to Bristol, Va., near the junction of the Virginia, North Carolina, Georgia, Kentucky and Tennessee line. It will pass through several counties in the state that are now not touched by railroads and will therefore, develop entirely new territory.

CALIFORNIA.—The Delta Consolidated Mining Co., of Bayles, Cal., will begin this spring the construction of seven miles of railroad to connect the mine property with the Southern Pacific Railroad at Delta. Large bunkers will be erected here, into which the ore from the mines will be dumped, from which it can be quickly loaded into Southern Pacific cars. The construction of these and other improvements will begin in April, according to a statement made recently by an official of the company.

CANADA.—A bill will be presented to the Dominion Parliament providing that at least 10% of a railroad must be completed within two years from the date of its incorporation and 10% more in the second and third years. If the line is not completed within five years the charter becomes void.

CANANEA, YAQUI RIVER & PACIFIC.—The concessions held by E. H. Harriman and associates for building a branch of the Cananea, Yaqui River & Pacific R. R. between Nogales, Mexico, along the international border between Nogales and Naco, Mexico, is to be amended to provide for extending the line from Naco to Juarez, a distance of about 150 miles. The Nogales-Naco line will be 100 miles long, and must be finished in 14 months. The Mexican Government plans to have the whole international border protected by a continuous line of railroad. E. A. McFarland, Tucson, Ariz., is Ch. Engr.

EVANSVILLE TERMINAL.—Incorporated in Indiana to build a railway from Evansville to Newburg, Ind., ten miles. Capital stock, $200,000. The directors are: A. F. Karges, M. S. Sonntag, W. H. McCurdy, James V. Rush, Fred. W. Reitz, William A. Koch, Louis A. Dana, A. P. Lahr and Charles W. Hartmetz, of Evansville, Ind.; and Charles W. Brizius and Wesley Wilson, of Newburg, Ind.

GRAND TRUNK PACIFIC.—Contract has been let for construction on the Grand Trunk Pacific 100 miles east from Prince Rupert, to FOLEY, WALSH & STEWART, of St. Paul, Minn. This is one of the heaviest pieces of work on the Grand Trunk Pacific and involves $10,000,000 expenditure. Construction is to begin at once, and 1,000 men will be employed as soon as they can be secured.

KANSAS CITY, MEXICO & ORIENT.—The construction force on this railway will be greatly increased in a few weeks, it is reported, and an effort will be made to complete the line to the crossing of the Rio Grande during the next 18 months. The route has been located, and most of the right-of-way obtained. When the gap between the Texas division and the line south from Kansas City is finished, construction work will be concentrated upon the line between San Angelo, Tex., and the Rio Grande. The road will cross the Southern Pacific at Alpine, where division terminals will be established. The Rio Grande will be crossed five miles from Presidio del Norte. It is about 300 miles from San Angelo to this Rio Grande crossing point. Considerable heavy construction work will be encountered on the last 50 miles of the route. The line between San Angelo and Alpine will split a territory 200 miles wide, now without railroad facilities. It will run 75 miles in places without striking a town. Ozona and Fort Stockton are the only towns of importance touched in the 200 miles between San Angelo and Alpine. C. H. Webster is Ch. Engr., Kansas City, Mo.

LOS ANGELES & HARBOR R. R.—According to a press report the Gould System will build an outlet to the Pacific through Los Angeles. Two companies, called the Los Angeles & Harbor Railroad Co. and the Los Angeles Harbor Co., have been incorporated, with capital aggregating $4,000,000, in Los Angeles. A. C. Bird, former Vice-Pres. and Gen. Traffic Mgr., is head of both companies.

LOS ANGELES & SAN FRANCISCO SHORT LINE.—This company has filed incorporation papers to build a line between San Francisco and Los Angeles, Cal. With a capital of $2,000,000, soon to be increased, and of which $441,000 has already been subscribed, the company announces that it will construct a direct route, already fully surveyed and 80 miles shorter than the Southern Pacific. The time is to be cut three hours.

John Cross, of Los Angeles, is Acting Pres. and Gen. Mgr.; Walter F. Haas, former City Attorney, is Chief Counsel, and Charles S. Burnell, Assistant Counsel and Acting Treasurer. The other directors are A. P. Cross, M. K. Miller, of Oakland; M. H. French, W. R. Ireland, Charles Wier and John E. Loomis.

NEVADA CENTRAL.—This company, which is under option to the Western Pacific Railroad, has under consideration the construction of a branch line to Wonder, Fairview and Rawhide, Nev., it is said. This may result in the abandonment of the projected line to Fairview and Fallon by the Navada Hills Mining Co., as well as the proposed line from Schurz to Rawhide, the outlet via the Nevada Central being much shorter to the Utah smelters and eastern points, insuring lower freight and passenger rates. The Nevada Central runs from Battle Mountain to Austin, Nev., 93 miles. J. M. Hiskey is Supt., Austin.

PACIFIC & EASTERN.—J. W. Morris, Ch. Engr., Medford, Ore., informs us that surveys are now being made for the proposed extension from Eagle Point to Butte Falls, Ore., 21 miles. Right-of-way is not secured yet. Capital for construction has been obtained. Date for letting contracts not decided, but it probably will be soon. H. Lewis, Portland, Ore., is Pres. Noted on Feb. 20.

PADUCAH NORTHERN.—Mark Wymond, Ch. Engr., Paducah, Ky., advises us that contracts probably will be let in June by this company. Surveys are being made. Right-of-way is partly obtained. Capital is being negotiated. The railroad will be about eleven miles long and will run from Paducah, Ky., to the Ohio River crossing at Metropolis, Ill. Geo. C. Wallace, Paducah, is Pres. Noted last week.

PANA, GIRARD & JACKSONVILLE.—Company has been incorporated in Illinois. The capital stock is nominally $50,000. It is proposed to construct a railroad from Pana, Christian County, through Girard, Macoupin County, to Jacksonville, Morgan County. The incorporators and directors are B. F. Darneille, John J. Stowe, Charles E. Sargent, J. N. Anderson and W. W. Bercher.

ROSCOE, SNYDER & PACIFIC.—F. W. James, Pres., Abilene, Tex., informs us that this railway will be built from Roscoe, Tex., northwest to New Mexico state line, 200 miles. Surveys have been made for 50 miles. Right-of-way is practically all secured. Work is nearly completed to Snyder, a distance of 30 miles, of which about six miles of track remain to be laid. No contracts have been let beyond Snyder. It is proposed to build from Snyder to Fluvanna, Tex., 20 miles, some time this year. Martin Duvall is Ch. Engr., Roscoe, Tex.

VERA CRUZ TERMINAL.—Contracts probably will be let in a few weeks for construction of the proposed $8,000,000 terminal at Vera Cruz. The local board of the Vera Cruz Terminal Co., at Mexico City, comprising representatives of the Mexican Government and the railroads' interests centered at Vera Cruz, was organized recently and all matters pertaining to the new terminal are placed in its hands. Walter Morcom, Gen. Mgr. of the Mexican (Vera Cruz) Railway, is Chn. of the Board, and L. W. Brown, Secy. The company will do some of the preliminary work, leaving the principal work for the successful contractors. Nothing has as yet been done beyond laying plans to take up and push the undertaking as rapidly as possible. It is the intention to have the finest and most extensive terminals and port facilities in Mexico and the plans which have already been approved call for the expenditure of about $8,000,000, nearly $1,000,000 of which will be expended for the union passenger station and office building for the roads interested. The remaining $7,000,000 will be devoted to enlarging the present track facilities, building warehouses and wharves, and the installation of modern loading and unloading machinery. The local board is composed of the following: Joaquin D. Casasus, representing the Mexican Government; Colonel Pablo Escandon and Walter Morcom, representing the Mexican Railway; Martin G. Ribon, the Interoceanic, and John B. Body, the Vera Cruz & Pacific and Alvarado railways, with headquarters in Mexico City.

YANKTON & GULF.—We are advised by Henry L. Resing, of Wichita, Kan., who is securing right-of-way through Kansas for this company, which will build from Yankton, S. Dak., to Galveston, Tex., that right-of-way has been secured through Oklahoma. Company is changing about 200 miles of survey between Wichita, Kan., and Kellyville, Okla. Engineers are now in the field. Company is not ready to let contracts. Fremont Hill, of Yankton, is Pres. Noted on Sept. 26.

ELECTRIC RAILWAYS.

CHICOPEE, MASS.—The Springfield St. Ry. Co. plans to build an extension of its line on East St. in Chicopee. A franchise will be applied for as soon as the plans have been completed. H. C. Page is Gen. Mgr., Springfield, Mass.

MIDDLETOWN, CONN.—In accordance with the plans of The Connecticut Co. to construct a line from Wethersfield to Middletown, public hearings have been held in the towns of Wethersfield and Rocky Hill relative to highways over which the line is to run, location of same as to grade, the location of poles and other fixtures. Active preparations are being made to begin construction. M. T. Rider, Ch. Engr., New Haven, Conn.

WOODBURY, CONN.—The Railroad Commissioners have issued an order approving the proposed method of construction of a trolley line from Woodbury to Waterbury by the Woodbury & Waterbury St. Ry. Co.

MINEOLA, N. Y.—The South Shore Traction Co. has been granted an extension of time of one year in which to complete construction of that part of the company's line which runs through Nassau County. Noted on March 12.

The Board of Supervisors has granted the New York & North Shore Traction Co. an extension of time to accept the franchise granted on Jan. 20, for building a branch of its Port Washington line through Manhasset, Great Neck and Little Neck to the city line at Flushing. The company has filed a certificate with the Secretary of State showing its proposed extensions. J. A. McElhinny is Secy., 120 Broadway, New York; Hugh Cook is Ch. Engr., Roslyn, L. I., N. Y.

JOHNSTOWN, PA.—The Johnstown Passenger St. Ry. Co. has decided to build a line this summer from Franklin St., Johnstown, to the Millcreek Road in Westmont, a distance of about two miles. Plans will be prepared and surveys started at once. Contracts probably will be awarded in about one month. C. Nelson Smith is Ch. Engr., Johnstown. Noted on Jan. 23.

MONONGAHELA, PA.—The City Council on March 16 granted the Monongahela & Carroll St. Ry. Co. a franchise over Park Ave. to the city limits. Work is to be started within six months. George Hosack, Park Bldg., Pittsburg, is Pres. Company proposes to build a line from Monongahela to Washington. Noted on Jan. 30.

BALTIMORE, MD.—The Short Line Terminal Co. has asked for a charter from the Legislature to build an independent terminal in Baltimore for the Annapolis Short Line, which is now owned by the Maryland Electric Railways Co. Construction of the line has already begun from Clifford Station to this city. The incorporators are John Wilson Brown, Pres. of the Maryland Electric Railways Co., Baltimore; Shellman B. Brown, Arthur D. Foster, Daniel R. Randall and J. Winfield Henry.

A bill has been introduced in the Legislature by N. P. Kehoe of Baltimore County, to incorporate the Rural Electric Railway & Power Co. The incorporators are Hugh J. Gallagher, Walter A. Kephart, W. T. Dietrick, Dr. Harry C. Hess, Robert W. Mobray and Jacob S. Parr. The route of the proposed road is from Lauraville to the Falls road, at or near Belvidere Ave., and from Baltimore city to Sparrows Point by way of the North Point road. Extensions of the proposed road are provided for in the bill. The capital stock is $500,000, with power to increase in the discretion of the directors. The company is authorized to construct and operate branch roads and to connect with other roads and with steamboats. The right to consolidate is also given.

WASHINGTON, D. C.—The Senate has passed a bill authorizing the Baltimore & Washington Transit Co. to extend its lines in the District of Columbia. Noted on March 12.

BLUEFIELD, W. VA.—The Bluestone Traction Co. has applied to the City Council for a franchise to build a line to South Bluefield. It is proposed to complete it this summer.

ST. MATTHEWS, S. C.—It is planned to build an electric railway from St. Matthews to the Congaree River. D. G. Zeigler & Co., of Columbia, S. C., and Atlanta, Ga., are the engineers. Among others interested are J. S. Wannamaker, J. A. Banks, T. A. Amaker, H. C. Paulling, R. D. Zimmerman, H. A. Raysor, C. F. Zeigler, M. Jerecky, M. D. Keller, J. H. Henegan, W. F. Buyck, O. H. Wingles, D. D. Buyck, W. T. C. Bates and A. R. Able, of St. Matthews.

CHARLESTON, S. C.—It is announced that the committee consisting of James M. Seignious, Chn.; Wilson G. Harvey, James Allen, Jr., R. B. Gilchrist and A. C. Kaufman, appointed at a meeting of business men held in Charleston, S. C., on Feb. 12, has unanimously approved the plan for the completion of the Charleston & Summerville Electric Railway. Their report gives the total estimated cost of the main line from Charleston to Summerville at $600,000. To provide this amount subscriptions are being secured from local and other interests for an issue of about $600,000 bonds. Existing claims, it is said, can mostly be taken up with preferred stock at par. Total amount heretofore expended, apparently $90,020, for which $204,000 in bonds of the company are pledged as collateral security. It is estimated the road will earn from $150,000 to $170,000 annually. Noted fully on Jan. 9.

ATHENS, GA.—The Athens & Anderson Electric Ry. Co. will make surveys at once for an electric railway, 73 miles long, through Carnesville, Hartwell, Cannon and Iler, Ga. W. L. Hodges, of Hartwell, is interested.

PADUCAH, KY.—We are officially advised that the Paducah Southern Electric R. R. Co. expects to build 25 miles of its line this year, from Paducah to Mayfield. John C. Short & Son, 51 Liberty St., New York, and the Windsor Trust Co., of New York, are the company's financial agents. Short & Son will negotiate with contractors and firms furnishing equipment and are ready to let contracts, especially contracts for grading and rails. The American Engineering Co., of Indianapolis, Ind., has completed the engineering work and its report is with Short & Son for inspection by contractors. The Southern Construction Co., of Paducah, is building the Paducah Southern Elec. R. R. John F. Harth is Pres. and H. H. Loving, Secy., at Paducah. Noted on Jan. 16.

DAYTON, OHIO.—C. N. Ferneding, of Dayton, Ohio, on March 13 was appointed receiver for the Dayton & Xenia Transit Co., which operates 51 miles of railway from Dayton, Ohio, to Xenia and to Spring Valley. Twenty miles of the line is on private right-of-way.

MASSILLON, OHIO.—The F. A. Pease Engineering Co., of Cleveland, is making survey for the Massillon, Wooster & Mansfield Traction Co.'s line between Massillon and Mansfield. H. W. Loeffler, Secy. of the Massillon & Northern R. R. Co., has announced that the Massillon, Wooster & Mansfield Traction Co. had decided to undertake the construction of the Massillon & Northern's proposed line to Barberton, Ohio, by way of Turkeyfoot Lake, Manchester, Canal Fulton and Barberton. The route of the M., W. & M. line to Mansfield is the same as that of the Massillon & Northern R. R. for a distance of about six miles west of Massillon. Noted on Feb. 6.

JEFFERSON, IOWA.—The Jefferson Interurban Ry. Co. has been incorporated in Iowa to build an interurban railway from Jefferson to Des Moines and Perry. Two routes are under consideration, one by way of Bagley to a connection with the proposed Des Moines & Sioux City Ry. of Lake City, Iowa, and the other by way of Fort Dodge Junction and Paton, connecting with another proposed electric line out of Fort Dodge. Capital stock, $10,000. Incorporators: Albert Head, Pres.; Henry Haag, Vice-Pres.; Mahlon Head, Treas. P. L. Cockerill, E. H. Carter, S. J. Sayers, Judge Z. A. Church, J. M. Forbes, A. D. Howard and Fred E Gamble, are the directors.

TOPEKA, KAN.—The Marion Construction Co. has been incorporated in Kansas to build the Kansas City & Kansas Southwestern Electric Ry., connecting Topeka, Kansas City, Independence and Lawrence, Kan. Work probably will be started at once. Capital stock, $500,000. Incorporators: J. E. Martin, Minneapolis; E. M. Lambkin, Kansas City; W. L. Moyer, New York; W. Laming, Tonganoxie; S. W. Brewster, Chanute, Kan.; H. E. Hopper, Indianola, Ia.; C. S. Dudley, Minneapolis, Minn. Noted on March 12.

SHERIDAN, WYO.—S. A. Broadwell, of Omaha, Neb., has applied for a franchise to build an electric railway in Sheridan, agreeing to have part of the line in operation by next fall. The road will connect the large coal camps in the vicinity with this city. Mr. Broadwell obtained a franchise last fall from the council of Thermopolis, Wyo., as noted on Oct. 31, 1907.

KANSAS CITY, MO.—We are officially advised that surveys are completed and the right-of-way secured for the Kansas City & South Eastern Ry., which will be 30 miles in length. The line will extend from Kansas City, Mo., in a southeasterly direction, passing through the towns of Leeds, Raytown, Little Blue, Lee's Summit, Cockrell and Lone Jack, tapping one of the best farming districts in the State. The road will use gas-electric motive power and will do a general railroad business. An issue of $600,000 30-year 5% bonds will soon be floated to build and equip the line. Chas. A. S. Sims, 3724 East 27th St., Kansas City, is Pres.; H. W. Gibson, Vice-Pres.; B. F. Shouse, Treas.; Geo. P. Norton, Gen. Atty.; J. C. Herring, Ch. Engr, Kansas City, Mo.

*COLUMBIA, MO.—The Missouri Land Improvement & Development Co. has applied to the City Council for franchise for a street railway in Columbia. S. A. Smoke is interested.

BROWNSVILLE, TEX.—The City Council has granted a 25-year franchise for a street railway to John G. Fernandez, A. C. Brokaw, F. W. Kidde, S. K. Hallam and L. H. Hallam, all of Brownsville. The franchise gives the grantees the right to build on all streets of the city. The company is required to begin work within twelve months and have two miles of road built and in operation within two years. Noted on March 12.

CLARKSVILLE, TEX.—Preliminary arrangements have been completed for the partial financing of the Texas Union Traction Co., which proposes to build an electric railway from Texarkana to Sherman, and ultimately to Mineral Valley via Fort Worth. It is proposed to ask a local franchise from the City Council. Noted on Feb. 13.

DALLAS, TEX.—S. E. McCully, Secy. and Gen. Mgr. of the Lawton, Denton & Dallas Electric Ry. Co., states that the plan has been revived and money is secured to begin surveys, obtain right-of-way and to do all preliminary work. The promoters would like to communicate with contractors who would take the bonds and build the road, of which, it is said, 80 miles will be without competition.

CHECOTAH, OKLA.—R. O. Smith, Vice-Pres. and Mgr. of the Fort Smith, Checotah & Shawnee Interurban Ry., according to the "Manufacturers' Record," has stated that the company is considering propositions from several engineering concerns to make the survey. The press report that construction would begin within a year is denied, as it is yet impossible to make a definite statement. Noted on Feb. 6.

TULSA, OKLA.—The Cherokee Belt & Interurban Ry. Co. of Tulsa, Okla., and Kansas City, Mo., with $500,000 capital stock, has been chartered in Oklahoma to build from a point on the Midland Valley Railroad to the Missouri, Kansas & Texas, passing through the counties of Craig, Tulsa, Rogers and Myers, at a cost not to exceed $10,000 per mile. The incorporators are: F. E. Montel of Kansas City; C. W. Butterworth, of Tulsa; J. R. Caudley, E. Pease and A. E. Leahe of Collinsville, Okla.

PUEBLO, COLO.—The Pueblo & Arkansas Valley Electric Railway Co. has secured an extension of time from April 1 to Oct. 1, 1908, in which to start construction work on its proposed interurban line from Pueblo, Colo., to points in the Arkansas Valley. The delay is said to have been caused by the inability of the company to secure right-of-way owned by various holders near Pueblo. Noted on Jan. 9.

ASHLAND, ORE.—The Oregon Rapid Transit & Power Co. has been incorporated by J. E. Watt, F. E. Merrick, F. E. Page, A. S. Bliton, S. A. Nye and F. L. Evans, with headquarters at Jacksonville, Ore. The object of the corporation is to construct and maintain an electric railway covering the entire Rogue River Valley, ultimately to connect every town in the valley, one with another by direct lines. The present plans contemplate the construction of a line with its southern terminus at Ashland and its northern one at Grants Pass. Running south from Grants Pass the line will take in Woodville, Gold Hill, Tolo, Central Point, Medford, Phoenix, Talent, Ashland, Jacksonville and Eagle Point. The election of officers will be held soon and permanent organization perfected. E[illegible]rs will be placed in the field and t[illegible] laid out and work will be commen[illegible]nce. Capital, $3,000,000.

REDDING, CAL.—Th[illegible]hise of the Reading & Red Bluff El[illegible]y, is reported to have been revoked [illegible]he Board of Supervisors because th[illegible]r beginning construction on its pro[illegible]ectric line from Redding to Red B[illegible] miles, had lapsed.

RICHMOND, CAL.—T[illegible]ustees have passed an ordinance gran[illegible] John Nicholl a franchise for an electr[illegible] railway.

LIGHT AND POWER PLANTS.

(* denotes that this wor[illegible]dvertised in Engineering N[illegible]

NEW BEDFORD, MASS[illegible] City Council has appointed a comm[illegible] investigate the question of municipa[illegible]ing. W. H. B. Remington is Clerk [illegible] Room 8, Library Bldg.

SPRINGFIELD, MASS.[illegible] Mulligan, Mgr. United Electric Lig[illegible] advises us that contract for undergro[illegible]duits to be built this season has been [illegible]d to FRED T. LEY & CO., 307 Mai[illegible] Springfield, Mass.

NEWPORT, R. I.—The [illegible] of Aldermen has instructed the City [illegible] to advertise for bids for lighting the [illegible] of the city for periods of three and fi[illegible]rs with electric, gas and vapor lamps. [illegible]resent contracts have two months y[illegible] run.

NORWICH, CONN.—We [illegible]ficially advised that the Uncas Power [illegible] 49 Shetucket St., Norwich, expects to co[illegible] work on its new dam not later than [illegible] week in April.

HARTFORD, CONN.—Th[illegible]rd of Contract and Supply has award[illegible] the contract for lighting the new bridge [illegible] the Connecticut River to the RIC[illegible] BALDWIN ELECTRIC CO., 214 Pearl [illegible] this city, providing that the work sh[illegible] completed by May 1. The plans are [illegible] similar to those used in lighting the New York subway and tunnels and call for 88 Tuxton lamps of 100 c. p. each. Four lights will be placed on each of the 22 trolley poles.

NEW YORK, N. Y.—Bids are asked until 3 p. m., April 6, by John W. Brannan, Pres. Bd. of Trustees, Bellevue and Allied Hospitals, for furnishing and setting lighting fixtures in pavilions A and B of the new Bellevue Hospital, First Ave. to East River and 26th to 29th St., Boro. of Manhattan.

Bids are asked by C. B. J. Snyder, Supt. School Bldgs., Bd. of Education, until 11 a. m., April 6, for installing electric equipment in addition to and alterations in Public School No. 16, on Matilda and Catherine Sts., about 150 ft. south of East 240th St., Wakefield, Boro. of The Bronx.

NEW YORK, N. Y.—Bids are asked by the Department of Health, until 9.45, April 1, to furnish and install electric and gas lighting fixtures in the measles pavilion on the grounds of the Kingston Ave. Hospital, Kingston Ave. and Fenimore St., Boro. of Brooklyn.

WASHINGTON, D. C.—Bids are asked until March 30 at the office of the Commissioners of District of Columbia, Washington, D. C., for furnishing metal cabinet work, electric lighting fixtures, electrical clock system and furniture and equipment for use in the new municipal building, Washington, D. C. Henry B. F. McFarland, Henry L. West and Jay J. Morrow are Comrs.

WASHINGTON, D. C.—Bids were received as follows March 21 by Elliott Woods at the office of the Superintendent of U. S. Capitol Building and Grounds, on revised specifications, for two chimneys for the power plant for the Congressional Buildings at Washington, D. C.: Canton Boiler Co., Canton, Ohio, $28,227, steel; M. W. Kellogg Co., New York, $35,990, radial brick; Weber Steel Concrete Chimney Co., Chicago, $21,750, reinforced concrete; H. R. Heinecke, 147 Fourth Ave., New York, $25,740, radial brick; National Electric Supply Co., Washington, $29,750, steel; Rust Boiler Co., Pittsburg, $26,273, steel; Alfons Custodis Chimney Construction Co., New York, $33,940, $29,445, $29,100, $25,175, radial brick.

Also revised bids for an electric crane for the power-house: Cleveland Crane & Car Co., Cleveland, Ohio, $9,245; M. W. Kellogg Co., New York, $9,390; Pauling & Harnischfeger, Milwaukee, $11,300; Whitney Foundry Equipment Co., Harvey, Ill., $9,520; Modern Steel Structural Co., Waukesha, Wis., $8,700; Morgan Engineering Co., New York, $9,390; Alfred Box & Co., Philadelphia, $9,000; Alliance Machine Co., Alliance, Ohio, $10,995; Manning, Maxwell & Moore, 85 Liberty St., New York, $8,475; Case Mfg. Co., Columbus, Ohio, $10,500; Northern Engineering Works, Detroit, $9,275, $9,475; Niles-Bement-Pond Co., 111 Broadway, New York, $8,240.

ROUGEMONT, N. C.—C. Harris, W. Cochran and H. L. Carver are interested in forming a company to develop electrical power. It is stated that it is their intention to establish a number of manufacturing plants.

GREENVILLE, N. C.—Plans are being made by the Southern Power Co. of Charlotte, N. C., to extend its transmission lines into this city. Work will soon begin on the construction of the line and is to be completed by Sept. 1. Dr. W. [illegible] Wylie is Pres.

ST. MATTHEWS, S. C.—D. [illegible] Buyck, J. S. Wannamaker, J. A. Banks and others propose organization of company capitalized at $400,000, to develop 2,068 HP. on High Hill Creek, build a 20,000-spindle cotton mill and construct electric railway to utilize said power. About 800 HP. [illegible] to remain for distribution to neighboring industries. Arrangements are expected to be perfected for early organization. D. G. Zeigler, of Columbia, S. C., and Atlanta, Ga., is Engr. and Arch.-in-Charge.

SLOCOMB, ALA.—It is stated that plans are being considered for construction of an electric light plant here. A. [illegible] Kelley is interested.

HATTIESBURG, MISS.—The Hattiesburg Traction, Gas & Electric Light Co. will erect a power plant for operating its street railway system and capable of lighting the city. C. Z. Stephens, Hattiesburg, is Gen. Mgr.

HOUMA, LA.—The city will install an electric light plant, to cost $30,000, complete. J. P. Campbell is Mayor.

NASHVILLE, TENN.—The City Council has granted the French Broad River Power Co. a 45-year franchise to furnish electricity within the limits of the city. The company proposes to erect a dam and hydro-electric plant at P[illegible] Island in the French Broad River for the purpose of generating electricity to be transmitted to Knoxville. Under the terms of the franchise, the plant must be in operation by March, 1912, and, upon the completion of the plant, pay the city $4,000 a year for the first four years, and then $6,000 a year until 1% of the gross earnings in the city amount to $6,000 a year, when the company is to pay the city 1% of its gross earnings in the city.

SOUTH BROOKLYN (Cleveland post-office), OHIO.—The Cleveland City Council has appropriated $[illegible]5,000 for machinery for the municipal electric lighting plant at South Brooklyn. This additional machinery will triple the capacity of the plant. C. N. Smith, Cleveland, is Supt.

GIRARD, OHIO.—L. R. Benjamin, of the Girard Journal, is interested in the construction of a municipal water-works and electric light plant for Girard, it is stated, and would be glad to receive information with regard to same.

CEDARVILLE, OHIO.—The City Council is considering the question of installing a lighting system. The citizens recently voted in favor of issuing bonds for the construction of a municipal electric light plant.

WEST MILTON, OHIO.—L. A. Pearson, of West Milton, writes us that he proposes to construct a hydro-electric plant here to cost $10,000. It is his intention to install a lighting system of 25 2,000-c.-p. arc lamps and 1,000 incandescent lamps. Bids will be received in the summer. No engineer has been employed.

NORTH CHICAGO, ILL.—Bids were received as follows March 19, at the Bureau of Navigation, Navy Dept., Washington, D. C., for the construction of a power plant at the Naval Training Station, North Chicago, Ill.: C. L. de Muralt, 114 Liberty St., New York, $161,480, $155,480; Joseph McWilliams, Louisville, Ky., $159,400, 9 months; E. J. McDonough, 231 Kenzie St., Chicago, $130,000, 8 months; Arnold Co., 181 La Salle St., Chicago, $170,000, 9 months; Downey & Kruse, Milwaukee, Wis., $129,117, 8 months; Thomas & Smith, 17 South Carpenter St., Chicago, $155,383; W. H. Schott, American Trust Bldg., Chicago, $154,823, 7 months; Chafer Co., Cleveland, Ohio, $163,378; D'Olier Engineering Co., 131 South Eleventh St., Philadelphia, $131,800; Falkenau Engineering Co., Stock Exchange Bldg., Chicago Ill., $150,000, $144,500, $144,000, $139,000, $147,000, $142,000; Standard Engineering Corporation Land Title Bldg. Philadelphia, $127,667; L. H. Nielsen Co., Pittsburg, $176,000.

MOLINE, ILL.—The United Light & Power Co., Moline, Ill., incorporated with a capital stock of $60,000 to supply gas and electricity to the towns of East Moline, Silvis and Watertown, Ill., is planning to install a plant during the coming summer.

GREEN BAY, WIS.—We are officially advised that the contract to construct a heating plant for Brown County, has been awarded to MARTIN & WIGMAN, of this city, at $6,990. Elmer S. Hall is County Clerk.

INDEPENDENCE, KAN.—T. E. STACEY has contract to build a power-house here and will begin construction immediately.

MINOT, N. DAK.—Arrangements are being made to erect a power plant that will meet the needs of the entire city. It is proposed to organize a stock company to build the plant. J. A. Brunner is interested.

GLASGOW, MONT.—The city of Glasgow is contemplating the installation of waterworks, electric lighting system and making other improvements. H. C. Allen is City Engr.

PINE BLUFF, ARK.—Plans for the buildings of the Pine Bluff Light & Water Co. have been completed by Ford, Bacon & Davis, 115 Broadway, New York, N. Y., and contracts for the construction of a 3,000,000-gallon reservoir. B. C. Fowles, Pine Bluff, is Mgr.

NAVASOTA, TEX.—The R. A. Horlick Co. has secured a franchise and will install machinery for furnishing electric lights, it is stated. A 250-HP. Corliss engine, 120-KW. 3-phase, 60-cycle alternating, and a duplicate 50-KW. direct-connected generator, switchboards, transformers, etc., will be installed. R. W. Horlick is Mgr.

ALAMOGORDO, N. MEX.—Merrill H. Fisher is preparing plans, it is stated for constructing an electric power station here.

FRESNO, CAL.—For the purpose of furnishing power to pump water for the irrigation of a tract of 15,000 acres located in the Stone Corrall country, the San Joaquin Light & Power Co. of Fresno contemplates the extension of its transmission lines into that territory for a distance of about 21 miles. A. G. Wishon, Mgr., Fresno, states that a sub-station will be located about 16 miles from Dinuba, near the Docker Place.

BISHOP, CAL.—The Nevada-California Power Co., of Tonopah, Nev., it is reported, intends to enlarge the plant at Bishop, Cal., at a cost of about $500,000. The plant now has [illegible] HP., and it is proposed to increase the power to 20,000 HP. C. M. Hobbs is Mgr., Tonopah.

CORNING, CAL.—Stephen E. Kiefer, Engr., of Berkeley, Cal., is interested in a proposition to construct an irrigation system and develop the water power of Elder and McCarthy Creeks in the western portion of Tehama County. No construction work will be done until next winter. Surveys and plans will be prepared during the coming summer.

JEROME, ARIZ.—Paul Smyly, Secy.-Treas. of the Two Republics Mining Co., Jerome, Yayapai County, has announced that the company will install an electric plant early in the summer to run drills and pump air in the tunnel. There is a water head of 15 HP. on the property, which will be utilized for the generation of motive power. Work is in progress on a 700-ft. tunnel, 6 × 4½ ft. in the clear, and 1,200 ft. will be driven soon, which will tap the ledge at about 1,000 ft. in depth.

ST. MARIES, IDAHO.—Plans have been prepared by C. B. Bride, of Spokane, Wash., for the development of 100,000 HP. on the St. Joseph River in northern Idaho for the Chicago, Milwaukee & St. Paul Ry. Co. The railway company is contemplating the installation of an electrical plant to furnish energy to operate its trains across the Bitter Root divide and to operate several sawmills and other manufacturing plants in Kootenai County. It is stated that the work can be completed in about three years and will cost $3,000,000. A. J. Barling, of Chicago, is Pres.

OTTAWA, ONT.—Bids are asked by J. E. Brown, Electrical Supt. Municipal Electric Dept., until April 1 for meters, transformers, incandescent and arc lamps, wire globes, carbons, hardware and sundry supplies.

BROCKVILLE, ONT.—The ECONOMICAL GAS APPARATUS CONSTRUCTION CO., East Front St., Toronto, have been awarded the contract for installing a set of four purifier boxes for the gas works here, at a contract price of $9,520.

PORTAGE LA PRAIRIE, MAN.—The Central Electric Co., Ltd., proposes to expend between $25,000 and $40,000 for constructing a new building and other improvements. John O'Brien, Portage La Prairie, is Mgr.

MOOSE JAW, SASK.—Bids are asked until April 6 by John D. Simpson, Secy.-Treas., for work in connection with the extension of the municipal electric light and power plant, as follows: Turbo-alternators and exciters, condensers and pipe work, main switchboard and connections.

MISSION CITY, B. C.—H. Windehank has been granted the right to develop electrical power at Silver Creek, for use in Mission City.

GRAND FORKS, NEWFOUNDLAND.—It is reported that the WALSH HOLYOKE STEAM BOILER WORKS, of Holyoke, Mass., has secured the contract to furnish and install a steel penstock with its branches for the electrical power station of the Newfoundland Development Co. at Grand Falls. The cost is reported to be $210,000. Work is to begin about May 15. George F. Hardy, 309 Broadway, New York, N. Y., is Engr.

CHIHUAHUA, MEX.—The Mineral Railroad Co., the Street Railway Co. and the plant of the Industrial Electric Co., Chihuahua, Mex., have been taken over by and merged into the Campañía Elétrica y de Ferrocarriles de Chihuahua, S. A., which has been organized with a capital of $2,200,000. It is the purpose of the new company to convert the Mineral Railroad from a steam to an electric line, and also to operate all of the city lines by electricity. A plant with a capacity to serve these companies and furnish current for lighting will be built. The president of the company is Enrique C. Creel; A. C. Nash is Gen. Mgr.

BRIDGES.

(denotes that this work is advertised in Engineering News.)*

FITCHBURG, MASS.—F. A. McCAULIFF, Fitchburg, has been awarded the contract by the Board of Street Commissioners for constructing a concrete arch bridge complete, including all excavation and incidental work, at $14,256. David A. Hartwell is Clk. Bd. List of bidders noted March 12.

MERIDEN, CONN.—The New York, New Haven & Hartford R. R. Co., owners of the franchises and privileges of the Meriden, Waterbury & Connecticut River Railroad Co., has been ordered by the State Railroad Commissioners to make and maintain the bridges, abutments, tunnels, arches, excavations, embankments and approaches carrying West Main St. in the city of Meriden over the tracks of the above railroad in such condition as the convenience and safety of the public travel upon the highway may require.

NUTLEY, N. J.—Bids are asked until 3 p. m., April 2, by G. F. Drum, County Engr., Essex County, at the Court House, Newark, N. J., for repairing and altering the aprons of the drawbridge over the Passaic River here.

SOMERSET, PA.—Bids are asked by R. M. Rininger, Clk. County Comrs., until noon, April 2, for the construction of a stone arch bridge of 30-ft. span and 12-ft. roadway across Quemahoning Creek at Pilltown, Jenner Township, Somerset County. Josiah Specht is Chn. Comrs.

VICKSBURG, MISS.—Bids are asked until noon, April 9, by J. D. Laughlin, Chancery Clk., for constructing a wooden bridge on road No. 19 near Yokena.

GULFPORT, MISS.—The County Commissioners have rejected all bids for the construction of a drawbridge over the Tchouticabouffa River. New bids are asked.

SCRANTON, MISS.—Bids are asked until April 6 by the Board of Supervisors, I. P. Delmas, Clk., for constructing a steel bridge over Dog River on road No. 2; a bridge over Cooper's Mill Creek Rd. No. 114, district No. 5, and for filling and repairing approach to north side of Fort Bayou Bridge on road No. 61, district No. 4.

NASHVILLE, TENN.—JOHN D. FOY, English-American Bldg., Atlanta, Ga., has been awarded the contract for constructing approaches and piers for Jefferson St. bridge over the Cumberland River.

CINCINNATI, OHIO.—Bids are asked until noon, April 7, by the Board of Trustees, Cincinnati Southern Ry. Co., Ingalls Bldg., Cincinnati, for the construction of the Bldg., abutments and retaining walls for the substructure of the viaduct for the terminal track from Eighth St. and McLean Ave. to Third and Front Sts. Stanley Ferguson is Secy. Bd.

ELYRIA, OHIO.—Bids are asked until 7 p. m., March 30, by the County Commissioners for furnishing the material (except floor plank) and constructing a steel bridge in La Grange Township, known as the Vermont St. bridge. Charles Chandler is Clk. Comrs.

ZANESVILLE, OHIO.—Bids are asked until noon, April 20, by the County Commissioners for the erection of the substructure of a highway bridge across Salt Creek in Salt Creek Township. L. E. Brelsford is County Audr.

WASHINGTON C. H., OHIO.—Bids are asked until March 28, by H. D. Chaffin, County Audr., for construction of substructure and bridge over Sugar Creek County road, and substructure and bridge over Pain Creek, Milliken Ave.

YOUNGSTOWN, OHIO.—F. M. Lillie, City Engr., has completed preliminary plans for an overhead bridge at Spring common.

LIMA, OHIO.—A. Craig, County Surv., is preparing plans and specifications for the construction of a bridge across the Ottawa River on the Albrecht road in German Township.

LORAMIES, OHIO.—Bids are asked until March 28, by J. C. Rosser, County Audr., Sidney, Ohio, for furnishing material and constructing a steel high-truss single-track bridge, with 16-ft. roadway, over Loramie Creek, McLean Township, near Loramies; bids to be received on both a single-span high-truss of 125 ft. and on two spans, low-truss of 68 ft. each, floor to be buckled plate, with either brick or concrete. Bidders are asked to submit plans of their own designs on said bridge.

FRANKFORT, IND.—Bids are asked until March 26, by the County Auditor, for the following bridge work: 24-ft. concrete arch, four 6-ft. concrete arches, two 10-ft. concrete arches, two 8-ft. concrete arches, and bridge repairs to Murray bridge, Dawson Kern bridge, Merritt bridge, Gurrn Or bridge and Knapp bridge.

BROOKVILLE, IND.—THE HACKEDORN CONTRACTING CO., Indianapolis, Ind., has been awarded the contract by the County for the construction of three reinforced concrete arches, at $3,780.

The County has awarded the contract for the construction of seven bridges to the PAN-AMERICAN BRIDGE CO., Newcastle, Ind., at $11,625.

*BENTON HARBOR, MICH.—We are officially advised that all bids for the construction of a steel bridge over the St. Joseph River were rejected on March 19 by the Joint Committee of the cities of Benton Harbor and St. Joseph. New bids will be asked. J. W. Pearl is Engr. Committee.

AURORA, ILL.—JOHN EITELGOERGE has been awarded the contract for paving the New York St. bridge by the Road and Bridge Committee, at $6,002.

MILWAUKEE, WIS.—We are officially advised that the contract for constructing the bascule bridge across the Kinnickinnic River on Kinnickinnic Ave., was awarded on March 17 by the Board of Public Works to ARTHUR VOGEL, at about $119,842. C. J. Poetsch is City Engr.

FERGUS FALLS, MINN.—JOHN LAURITZEN was awarded the contract on March 6 by the Council for the construction of the Mill St. bridge, at $19,893.

JOPLIN, MO.—The city has voted $50,000 for the construction of a viaduct. J. B. Hodgdon, 201 Joplin St., is City Engr.

KANSAS CITY, MO.—The Park Board has had designs prepared for the construction of two reinforced concrete bridges to be built in Swope Park, one at 71st St., and the other at 64th St. The 71st St. bridge will be 400 ft. long of two spans, and the 64th St. bridge will be 250 ft. long. Edgar A. Harper is City Engr.

ST. LOUIS, MO.—The city may rebuild the 18th St. bridge over Mill Creek valley and the railroad tracks. The southern half of the structure will be reconstructed at a cost of $140,000.

HAMBURG, ARK.—Bids are asked by J. C. Brown, County Judge, until noon, April 11, for the erection of several steel bridges.

PINE BLUFF, ARK.—The MORAVA CONSTRUCTION CO., Dallas, Tex., was awarded the contract on March 14 by the County for the construction of a steel bridge across Bayou Bartholomew, at about $3,289.

SILT, COLO.—Bids are asked until April 3 by the County Commissioners, Garfield County, for the construction of a steel-reinforced concrete bridge here. G. N. Houston, Denver, Colo., is Deputy State Engr. Noted March 5.

CHEHALIS, WASH.—Bids are asked until 2 p. m., April 7, by Ernst C. Bechly, County Engr., for an 80-ft. span steel bridge, with a 16-ft. roadway, to be erected on concrete foundations over the Newaukum River, at a point seven miles from Chehalis, the contractor to remove the old bridge.

CONNELL, WASH.—Bids are asked until 1 p. m., April 6, by the County Commissioners, Franklin County, for the construction of one 50-ft. steel bridge and approaches, to be located about 4½ miles northeast of Connell. M. B. Pratt is County Audr.

AUBURN, CAL.—Bids are asked until 5 p. m., April 6, by the Placer County Supervisors, for the construction of a concrete and steel bridge across the Bear River, connecting the counties of Nevada and Placer.

VENTURA, CAL.—G. F. NOWAK, Santa Paula, Cal., has been awarded the contract by the trustees for the construction of the Santa Clara St. and the Prince Barranca bridges, at $3,400 and $4,500 respectively.

NEVADA, CAL.—The Supervisors of Nevada and Placer Counties have agreed on plans for the construction of bridge, 300 ft. long, across Bear River, near Dutch Flat, estimated to cost about $6,000.

TORONTO, ONT.—Plans for the construction of a viaduct, prepared by C. H. Rust, City Engr., have been approved, subject to slight changes, by the consulting engineers and by the Board of Control, and are now in the hands of G. A. Mountain, Government Engr.

WINNIPEG, MAN.—Bids are asked by M. Peterson, Chn. Board of Control, Winnipeg, until March 27 for a second-hand, single-track, through-truss, 2-span steel railway bridge, crossing Pinawa Channel, for the Point du Bois hydro-electric development, one span 155 to 165 ft. in length, and one of 100 to 115 ft. in length.

SAINT BONIFACE, MAN.—The Dominion government engineer has approved the plan to divert the Seine River at Provencher Ave., and to erect a bridge of concrete and masonry work at a cost of $80,000. The structure will be 65 ft. in width.

MONTEREY, MEX. — The TOPEKA BRIDGE & IRON CO., Topeka, Kan., has secured the contract for constructing two spans of reinforced concrete bridge over the Santa Catarina River at Monterey; bids opened March 1, at $14,000. The contract for constructing the superstructure will be awarded at a later date.

BUILDINGS.

(denotes that this work is advertised in Engineering News.)*

*BAR HARBOR, ME.—Bids were asked until 3 p. m., May 4, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction, including plumbing, gas piping, heating apparatus, electric conduits and wiring of the U. S. postoffice at Bar Harbor.

NEW YORK, N. Y.—We are officially advised that Samuel Sass, Arch., 21 Park Row, is preparing plans for five 5-story tenements, 38 × 100 ft. to be built on Pacific St., near Boerum Pl., Boro. of Brooklyn, for the Realty Associates, 176 Remsen St., Brooklyn. The buildings will be built of brick and stone, with architectural iron, galvanized iron skylights, tin roofs, gas fixtures, dumb waiters, cabinet mantels, water closets, lavatories and bath tubs. Cost $150,000.

Parfitt Bros., Archs., 26 Court St., Brooklyn, advise us that they are preparing plans for the construction of two additional stories to the Kings County Court-house, Brooklyn. It is expected that bids will be advertised for in about three weeks. Estimated cost, including complete equipment, $500,000. Bird S. Coler is Pres. Boro. of Brooklyn.

NEW YORK, N. Y.—We are officially informed that Edward Pearce Casey, 1 Nassau St., is preparing plans for a 5-story brick and stone police station, 100 × 100 ft., to be built on Delancey St., for the Police Department, 300 Mulberry St. Cost, $175,000. Theodore A. Bingham is Comr.

C. H. Cullen, 20 West 34th St., will prepare plans for remodeling a hotel building on Broadway between 43d and 44th Sts., into store, office and studio building for J. J. Astor, 23 West 26th St. It will have four stories, 60 × 200 ft., and will be built of brick and stone, fireproof. Cost, from $150,000 to $200,000.

Sommerfeld & Steckler, Archs., 19 Union Sq., advise us that they have prepared plans for three separate 6-story buildings to be built for John Katzman, 622 West 137th St. The buildings will be erected on Amsterdam Ave. and 158th St., and will cost altogether about $150,000. The owner is taking estimates now.

Estimates are being received by Wade & Willauer for alterations to the Earlington Hotel for the Seventy-second Street Co. The changes will cost $100,000.

NEW YORK, N. Y.—We are officially advised that estimates are being received for erection of a 5-story brick and stone tenement, 50 × 90 ft., which will be built at St. Nicholas Ave. and 180th St., by Stephen J. Egan, 561 West 186th St. Neville & Bagge, 217 West 125th St., are Archs.

SLOANE & MOLLER, 316 East 65th St., advise us that they have been awarded the carpenter contract for a building to be erected at 38 West 21st St. The structure will have six stories, will be 67 × 85 ft., and will cost about $300,000. Ditmars & Brite, 111 Fifth Ave., are Archs.; the Domestic Realty Co., 28 West 22d St., owner.

We are advised by W. A. Swasey, Arch., 40 West 33d St., that the Alden Hall Corporation has awarded contract to the GODFREY-EMSLEY CONSTRUCTION CO. to build the proposed 12-story fireproof apartment house to cover a plot 85 × 100 on the east side of Gramercy Park. Cost, $300,000.

HUNTINGTON, L. I., N. Y.—The Board of Education, care of George C. Hendrickson, has decided to erect a fireproof high school building, to cost $80,000.

NEW YORK, N. Y.—Bids are asked until 11 a. m., April 6, by C. B. J. Snyder, Supt. School Bldgs., Bd. of Education, New York, for installing heating and ventilating apparatus in Public Schools Nos. 24 and 1[illegible], Boro. of Brooklyn, and in Public School No. 17, Boro. of Manhattan.

JERSEY CITY, N. J.—A. H. Rosensohn, Arch., 747 Broad St., Newark, N. J., has completed plans for three 4-story apartment buildings, 50 × 52 ft., to be built on Monticello Ave., near Clinton Ave., Jersey City, N. J., for D. J. Murphy, Bayonne, N. J. Cost, $75,000.

We are officially advised that the TURNER CONSTRUCTION CO., 11 Broadway, New York, has been awarded the contract for the reinforced concrete floors and interior columns in the warehouse to be constructed for

W. S. Everson & Son, at Communipaw Ave., Jersey City. Work will be commenced immediately.

NEWARK, N. J.—Contracts will be let at once by Kitchell & O'Rourke, Archs., Scheurer Bldg., Newark, for constructing a 3-story school building for St. Columba's parish, Rev. Michael J. White, Rector. Cost, $90,000.

GREENSBURG, PA.—The Greensburg School Board, H. H. Fisher, Secy., desires preliminary sketches until April 1 for the construction of two brick school buildings to be erected this summer at a total cost of about $150,000.

PHILADELPHIA, PA.—Henry D. Dagit, Arch., 411 Walnut St., Philadelphia, has awarded a contract to MELODY & KEATING, Bailey Bldg., for erection of St. Francis de Sales' Roman Catholic Church, at 47th St. and Springfield Ave., It will measure 90 × 154 ft., and will be constructed of stone, with a large dome. The cost will be about $175,000.

Plans are being prepared for a freight station, 250 ft. square, to be erected on the block bounded by Eighth, Darien, Willow and Noble Sts., for the Philadelphia & Reading Ry. Co. In order to prepare the site for the station, JOHN O'ROURKE has been awarded a contract to tear down all the buildings on the block. William Hunter is Ch. Engr., Philadelphia.

Plans for a garage for the automobile patrol to be purchased by the city have been posted for estimates. At the same time estimates were invited on plans for a police station, two firehouses, a public bathhouse and improvement to two police stations. The garage will be erected at 3965 Germantown Ave. It will be one story high, of brick and stone and will adjoin the 43d Ward police station to be built next to it. The station will be a 3-story brick and stone building, measuring 130 × 38 ft., and will contain the usual police station equipment. Firehouses will be built at the corner of Erie Ave. and Marshall St., and at 3420 Haverford Ave. Each will be of brick and stone, two stories high, measuring 32 × 70 ft., and 34.7 × 153.5 ft., respectively. A storage station will be attached to the latter building. Plans for the public bath call for a 1-story brick and stone building of the usual type on the east side of Front St., below Thompson St. It will measure 46 × 100 ft., and will have a pool 69.8 × 31 ft. An addition will be made to the police station in Fifth St., above Race St., and the Fifth Ward station, in De Lancey St., below Fourth St. will be modernized and renovated. Henry Clay is Dir. Dept. Public Safety. James C. Baxter is Ch. Engr., Bureau of Fire.

SCRANTON, PA.—L. C. Holden, Arch., 1133 Broadway, New York, advises us that he has let mason contract to FRANK CARLUCCI, of Scranton, Pa., and carpenter work to LORD & WATERMAN, Scranton, for a 2-story stone residence, 57 × 67 ft., at Scranton, for F. W. Woolworth, to cost $60,000.

PITTSBURG, PA.—Thomas Hannah, Diamond Bank Bldg., Pittsburg, and C. L. Harding, 1316 G St., N. W., Washington, D. C., have been commissioned to prepare the plans for a $300,000 building to be erected in the East End for the local Y. M. C. A. The architects will have the plans completed and ready for bids in about two weeks.

Bids are being received by Janssen & Abbott, Machesney Bldg., Pittsburg, for constructing a 7-story addition to the Fort Pitt Hotel, owned by the Fort Pitt Improvement Co. The addition will be 100 × 100 ft., and will cost $400,000.

DARLINGTON, PA.—SAX & ABBOTT, 1328 Chestnut St., Philadelphia, were awarded the contract on March 20, for building the House of Detention at 22d and Arch Sts., for the city of Philadelphia. The building will be a 4-story and basement structure, measuring 90.1 × 93.2 ft., and will cost, when furnished, close to $200,000. The plans which were prepared by Philip H. Johnson, Land Title Bldg., Philadelphia, provide for a hearing room, officers', boys' and girls' quarters, detention rooms, dining and recreation rooms and other necessary apartments. The contractors' bid was $137,900; time, seven months.

FREDERICK, MD.—The Citizens' National Bank has awarded contract to the C. J. CASSIDY CO., 523 13th St., N. W., Washington, D. C., for constructing a banking building. The structure will occupy a site having a frontage of 75 ft. on Market St. and 60 ft. on Patrick St. J. A. Dempwolf, Center Sq., York, Pa., is Arch. Joseph D. Baker is Pres. of the bank.

*WASHINGTON, D. C.—Bids are asked until noon, April 8, by Elliott Woods, Supt., U. S. Capitol Bldg. and Grounds, for panel boards and boxes, pull boxes, etc., for the office building, U. S. Senate, Washington.

T. H. Pickford, 1410 G St., N. W., will erect apartment house, it is stated, to contain 40 apartments of six and seven rooms. The building will have eight stories and will cost $125,000. A. H. Beers, 717 14th St., N. W., is Arch. Construction is to begin at once.

The Commissioners of the District of Columbia have awarded contracts as follows for school buildings in Washington, D. C.: 12-room building on B St., between 13th and 14th Sts., S. E., to W. E. MOONEY, Lenman Bldg., Washington, at $91,036; 16-room building to GEORGE A. FULLER CONSTRUCTION CO., Munsey Bldg., Washington, at $97,500.

We are officially advised that plans and specifications are in the hands of the invited bidders for constructing a building for the Bureau of American Republics. The bids will be received on March 27. The building will have two stories, will be 130 × 160 ft., and will be fireproof. Kelsey & Cret, 1524 Chestnut St., Philadelphia, are Archs.

GREENVILLE, N. C.—The East Carolina Teachers' Training School Trustees have engaged Hook & Rogers, Charlotte, N. C., and H. W. Simpson, Newbern, N. C., to prepare plans for erection of school building to cost $100,000. Bids will be advertised for after April 4. T. J. Jarvis is Chn. of Com., Greenville.

James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of an extension to the postoffice at Greenville, S. C., to CLAES S. WALIN, 305 Dearborn St., Chicago, Ill., at $46,600; time, Sept. 1, 1909 Noted on March 12.

UNIVERSITY, ALA.—Contract has been awarded by University of Alabama to B. C. BYNUM CONSTRUCTION CO., Birmingham, Ala., for erection of engineering building and museum, at a total cost of $185,409. The structure will be finished in pressed brick; Frank Lockwood, Montgomery, Ala., is the Arch.

NEW ORLEANS, LA.—We are officially advised that Hale & Rogers, Archs., 11 East 24th St., New York, N. Y., have been retained to prepare plans for a 3-story limestone postoffice to be erected in this city. Estimated cost, $1,200,000. James Knox Taylor is Superv. Arch., Treasury Dept., Washington, D. C.

The plans prepared by Andry & Bindernagel, 211 Champ St., New Orleans, for a medical building for the Tulane University, have been accepted. Bids will be asked for soon. Edwin B. Craighead is Pres.

The Commissioners of the Port will receive bids soon for steel work for proposed shed 1,200 ft. long, to cost about $100,000. A. C. Bell is Engr.-in-Charge, Hibernia Bank Bldg.

CLEVELAND, OHIO.—Bids are asked until noon, April 6, by the Clerk of the Board of Education, East Sixth St., for construction of a school on East 55th St., between Scovill Ave., S. E., and Portland Ave., S. E., to be known as the Technical High School. Charles Orr is Dir. of Schools.

COLUMBUS, OHIO.—Bids are asked until noon, April 14, by the Commissioners of Franklin County, at Columbus, Ohio, for erecting a tuberculosis hospital, to be known as Cottage B. Frank L. Parkard is Arch.; Morton Hayes is Pres. of Board.

INDIANAPOLIS, IND.—Rubush & Hunter, Archs., American Central Life Bldg., has let the mason contract for the Masonic Temple, to PERRY & BOCK, Court St., and plastering to JOHN & BOLLAND, Chicago. The building will have seven stories and will be 130 × 150 ft. Cost, $400,000.

Bids will be received until about April 6 by Vonnegut & Bohn, Indiana Trust Bldg., for constructing a 3-story and basement office building, 60 × 100 ft., for the United Brotherhood of Carpenters and Joiners of America, State Life Bldg. Brick, Bedford stone and steel will be used. Estimated cost, $75,000.

GRAND RAPIDS, MICH.—Bids were received as follows March 24 at the office of James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction complete of the post-office building at Grand Rapids, Mich.: C. P. Cullen Co., Janesville, Wis., $379,000, $80,000 additional for white marble in lieu of sandstone; Charles Hoetz & Sons, Grand Rapids, $448,400, $97,000; John Pierce Co., New York, $384,354, $160,000; B. M. Zadeck Co., Chicago, $387,050, $100,000; M. Jerkens & Sons, Danville, Ill., $430,159; John McNabb Co., Grand Rapids, $415,800, $69,735; Wells Bros., Chicago, $349,570, $85,000, 18 months; Henry Shenk, Erie, Pa., $406,800, $88,000; Northern Construction Co., Milwaukee, Wis., $336,0[illegible], $94,000; E. P. Strandberg Co., Chicago, $404,971, $94,197; Paul Reisen's Sons, Michigan, $370,000, $98,000; Ambrose B. Stannard, New York, $378,875, $88,000; John Rodatz, Chicago, $406,323; Charles W. Gindele Co., Chicago, $349,850, $82,000; E. W. Reid, Detroit, $398,082, $88,670; William H. Maxwell, Seattle, Wash., $397,938, $82,000. Time to complete, Nov. 1, 1910.

ROBINSON, ILL.—The contract to erect a building for the Christian Church has been awarded to F. J. RANSOM, of Robinson, at about $112,750, it is stated.

CHICAGO, ILL.—Plans have been finished by Nimmons & Fellows, 208 Dearborn St., for a 10-story mercantile building, 50 × 100 ft., to be erected at Fifth Ave. and Van Buren St., for Arthur Dixon, 299 Fifth Ave. The structure will be built of reinforced concrete, with stone trimmings. Cost, $200,000.

Bids are asked until April 4 by D. H. Burnham & Co., Archs., Railway Exchange Bldg., Chicago, for interior alterations to the 7-story building at 45 Monroe St., for H. F. De Jonghe. The upper floors are to be used for hotel purposes.

CHICAGO, ILL.—Siegel, Cooper & Co., State and Van Buren Sts., are having plans prepared by C. A. Eckstorm, Tacoma Bldg., for a 7-story warehouse. It will cost about $250,000.

A veterinary hospital is to be erected at Halsted and 43d Sts., and will be under control of the State. Plans are nearly completed for the building. The site upon which the structure is to be built has been given by the Union Stock Yards & Transit Co., under a 99-year lease, at a nominal rental. According to present plans the building, which probably will be completed by Oct. 1, will cost $250,000. Dr. O. E. Dyson, Consult. Veterinarian, 4201 South Halsted St., and Arthur G. Leonard, Vice-Pres. and Gen. Mgr. of the stockyards company, are the promoters of the plan.

RHINELANDER, WIS.—We are officially advised that bids will be received about July 1 for constructing a 3-story courthouse, to cost $100,000. It will be of stone fireproof construction, 120 × 95 ft. C. H. Tegen, Metropolitan Bldg., Manitowoc, Wis., is Arch.; Arthur Taylor is Chn. Board Comrs. Noted on May 5.

MADISON, WIS.—The two lowest bids received by the Board of Regents of the University of Wisconsin, for constructing a brick and stone women's gymnasium building, were submitted by English Bros., Champaign, Ill., at $168,499, and F. E. McCarthy, Madison, $171,171.

MARINETTE, WIS.—James Knox Taylor, the Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a postoffice at Marinette, Wis., to HERBERT T. HAZELTON, 305 Dearborn St., Chicago, Ill., at $66,475; time, May 31, 1909. Noted fully on Feb. 27.

*GREEN BAY, WIS.—Bids are asked until 3 p. m., April 20, by James Knox Taylor, Superv. Arch., Washington, D. C., for the low pressure steam heating apparatus for the U. S. postoffice and court house at Green Bay.

MILWAUKEE, WIS.—The following contracts have been let by the Board of Normal Regents, Madison, for constructing a 3-story brick and stone normal school here. Mason and carpentering contract to R. B. HARTMAN, Wells Bldg.; heating and ventilating to LINDEMAN & HOVERSON, 350 Florida St., and plumbing to JOSEPH WITTIG, 810 Central St. Van Ryn & De Gelleke, 211 Grand St., Milwaukee, are Archs. Cost, $200,000.

Ferry & Clas, Archs., 419 Broadway, Milwaukee, are completing plans for 3-story additions to the Public Museum and Library building for the city. Estimated cost, $200,000.

Hood & Tullgreen, Archs., 82 Wisconsin St., will erect a 3-story apartment house, 96 × 135 ft., at Farwell Ave. and Keen place, to cost $90,000. Following are the contracts let: Masonry, to RIESEN & WILKE, 421 Third St.; steam heat, to ANDERSON & FERRIS, 463 27th St., and plastering to WILLIAM GREGORY, 982 Jackson St.

DES MOINES, IOWA.—The general contract has been let to the CAPITAL CITY BRICK & PIPE CO., Des Moines, for erecting a 5-story reinforced concrete office building, 132 × 132 ft., at Eighth and Walnut Sts., Des Moines, for the Hubbell estate, F. M. Hubbell, Son & Co., representatives, Equitable Bldg. E. A. Rush, 100 Jackson Boulevard, Chicago, Ill., is Arch. Estimated cost, $300,000.

RED WING, MINN.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a postoffice at Red Wing, Minn., to W. J. LONGCOR, Red Wing, Minn., at $46,243; time, June 1, 1909. Noted on March 12.

MINNEAPOLIS, MINN.—Long & Long, Archs., 830 Hennepin Ave., Minneapolis, are preparing plans for an 8-story pressed brick and cut stone, fireproof office building, to be built on Seventh St. and Nicollet Ave., for Simon Kruse, city. Cost, $100,000.

F. S. Jones, Dean of the Engineering Dept. of the University of Minnesota, expects to receive sketches from Clarence H. Johnston, Arch., Manhattan Bldg., St. Paul, soon, for the proposed engineering building, to be erected on the university grounds. The appropriation for this building is $250,000. Cyrus Northrop is Pres.

BURLINGTON, KAN.—Bids will be received at once by the County Clerk, for constructing a courthouse for Kit Carson County, to cost $200,000.

DEVILS LAKE, N. DAK.—Bids were received as follows March 24 at the office of James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office building at Devils Lake, N. Dak.: Dinny Bros., Grand Forks, N. Dak., $137,350; Thomas Berge, Grand Rapids, N. Dak., $133,900; Northern Construction Co., Milwaukee, Wis., $121,900; J. W. Miller, St. Paul, Minn., $127,839; W. J. Hoy Co., St. Paul, $128,712; General Construction Co., Milwaukee, Wis., $117,952. Time, Oct. 31, 1909.

COLORADO SPRINGS, N. DAK.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded to J. H. WIESE, South Omaha, Neb., contract for the construction of the Colorado Springs post-office, at $180,949. Time, Dec. 31, 1909.

*FORT D. A. RUSSELL, WYO.—Bids are asked until 1.30 p. m., April 15, by Capt. V. K. Hart, Acting Q. M., Cheyenne, Wyo., for constructing, steam heating, plumbing, electric wiring and furnishing and installing electric light fixtures in the following buildings at Fort D. A. Russell, Wyo.: Two sets of Colonels' quarters, one set of field officers' quarters, three double sets of Captains' quarters, four double sets of Lieutenants' quarters, four double sets of non-commissioned staff officers' quarters, two band barracks, three double Artillery barracks, six Artillery stables, for 138 horses, one field staff and band stable for 50 horses, two Artillery gun sheds and three double stable guard, saddler and farrier shops.

ST. HELENA, MONT.—Bids are asked until 11 a. m., March 28, by G. S. Conner, Secy. Board Library Trustees, Richie Bldg., St. Helena, for erection of a Carnegie Free Public Library building at St. Helena. W. H. Corlett is Arch.

HOUSTON, TEX.—The Shearn Methodist Congregation, Rev. J. W. Moore, Pastor, has decided to soon begin construction work on proposed church. The building will cost $200,000. Sanguinet & Staats, F. & M. Bank Bldg., Fort Worth, Tex., are Archs. A E. Barnes is Houston Mgr.

Bids are asked until April 1 by D. H. Burnham & Co., Railway Exchange Bldg., Chicago, Ill., for constructing a 10-story mercantile building at Houston, for Miss Kate Scanlon, of Houston. The building will be built of brick and granite, 100 × 150 ft., and will cost $500,000.

BREMERTON, WASH.—Bids were received as follows, March 21, at the office of the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for three brick buildings and connecting passages for the Naval Hospital at the Puget Sound Navy Yard, Bremerton, Wash.: Kieburtz, Smith & Rowntree, New York Block, Seattle, Wash., $190,000, $193,500, $188,500; E. J. Rounds & Co., Globe Block, Seattle, $191,000, $193,000, $195,000, $191,000; Matthew Dow & Co. Walker Bldg., Seattle, $195,000, $190,000, Cawsey & Lohse, Lowman Bldg., Seattle, $187,072; A. E. White & Franklin Fireproof Co., Alaska Bldg., Seattle, $188,920, $189,521, $191,625, $181,676; McInnis & Reed, Lumber Exchange, Portland, $179,489, $181,101, $182,560, $174,783; T. Ryan, 28 Sullivan Bldg., Seattle, $183,000, $178,000; Western Lime and Lumber Co., Coleman Bldg., Seattle, $186,000, $1[illegible], $189,643; W. M. Concannon, 112 Mar[illegible] St., San Francisco, $197,764, $205,364; [illegible] & Peters, Inc., Oriental Bldg., Seattle, $189,000 $182,000.

LOS ANGELES, CAL.—Bids were received as follows, March 1[illegible] at the office of James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for heating and ventilating system at the Los Angeles postoffice: Newell Bros., Los Angeles, $54,[illegible]; Iowa Mfg. Co., Oskaloosa, Iowa, $47,374; Hurley & Co., St. Paul, $[illegible]; Rowe-Daly Co., Omaha, [illegible] Johnson-Blumve Jay Co., Los Angeles, $57,777; Thomas Hoverty Co., Los Angeles, $52,000; G. G. Kees Domestic Engineering Co., St. Paul, $42,727; C. H. Sanborn, Boston, Mass., $62,000. Time to complete, [illegible] 1, 1910.

SAN DIEGO, CAL.—The San Diego Realty Co. will erect a hotel to cost $[illegible]. J. T. Richie is Pres.

*SAN FRANCISCO, CAL.—Plans for office building, storehouses, etc., to cost about $1,500,000, have been prepared by Rankin, Kellogg & Crane, Archs., 10[illegible] Walnut St., Philadelphia, Pa., as noted last week under miscellaneous contracts. Bids are asked until noon, May 4, by George [illegible] Williamson, Constr. Q. M., Fort Mason, for construction at Fort Mason, San Francisco, Cal., of a sea wall, crib wall, transport wharves and sheds for new Army Supply Depot for Quartermaster's Dept., U. S. A., in accordance with architects' plans.

The "San Francisco Chronicle" states that it is proposed to erect twelve Class A grammar and primary, eighteen "special construction," and three Class A high school buildings, if the bond issue project is carried at the special election to be held on May 11. The specifications prepared by Marsden Manson, City Engr., and Newton Tharp, City Arch., provide for an estimated expenditure of $1,480,000 for Class A grammar and primary schools, $1,685,000 for "special construction" buildings, $1,240,000 for three new high schools, and an addition to the Mission High School, and $595,000 for sites to be acquired by the city, a total of $5,000,000. The "special construction" buildings are not to be more than two stories high, with metal window frames and concrete or plaster walls. The only wood used in their construction will be in the floors. The following is a list of the proposed schools:

"CLASS A" BUILDINGS.—Adams grammar—Eddy St., between Van Ness Ave. and Polk St., 12 classrooms; estimated cost, $120,000.

Denman grammar—Page St., between Steiner and Pierce, 16 classrooms; estimated cost, $160,000.

Franklin grammar—Eighth St., near Harrison, 12 classrooms; estimated cost, $120,000.

Hancock grammar—Filbert St., near Jones, 16 classrooms; estimated cost, $160,000.

Jean Parker—Broadway, between Powell and Mason Sts., 16 classrooms; estimated cost, $160,000.

John Swett grammar—McAllister St., between Franklin and Gough, 12 classrooms; estimated cost, $120,000.

Jefferson primary—Bryant St., between Sixth and Seventh Sts., 8 classrooms; estimated cost, $80,000.

Lincoln grammar—Harrison St., near Fourth, 12 classrooms; estimated cost, $120,000.

Oriental public—Clay and Powell Sts., 8 classrooms; estimated cost, $80,000.

Mission grammar—Mission St., between 15th and 16th Sts., 16 classrooms; estimated cost, $160,000.

Irving primary—Broadway, between Montgomery and Sansome Sts., 8 classrooms; estimated cost, $80,000.

Spring Valley grammar—Washington St., between Hyde and Larkin Sts., 12 classrooms; estimated cost, $120,000.

"SPECIAL CONSTRUCTION" BUILDINGS—Bryant Cosmopolitan primary—York St., between 22d and 23d, 16 classrooms; estimated cost, $100,000.

Clement primary—Day and Noe Sts., 12 classrooms; estimated cost, $80,000.

Cooper primary—Greenwich St., between Jones and Leavenworth, 16 classrooms; estimated cost, $100,000.

Peabody primary—Sixth Ave., near California St., 16 classrooms; estimated cost, $100,000.

Holly Park primary—Holly Park Ave., between Highland Ave. and West Park, 16 classrooms; estimated cost, $100,000.

Madison primary—Clay St., between Walnut and Laurel, 12 classrooms; estimated cost, $80,000.

Marshall primary—19th St., between Valencia and Gurerro, 16 classrooms; estimated cost, $100,000.

McKinley primary—14th and Castro Sts., 16 classrooms; estimated cost, $100,000.

Sheridan primary—Minerva St., near Plymouth Ave., 16 classrooms; estimated cost, $100,000.

South End primary—Burrows St., between Berlin and Girard, 16 classrooms; estimated cost, $100,000.

Grattan primary—Alma St., near Grattan, 16 classrooms; estimated cost, $100,000.

Sutro grammar—12th Ave., between Clement and California Sts., 16 classrooms; estimated cost, $100,000.

West End primary—Mission St., between Naglee and Worden, 12 classrooms; estimated cost, $75,000.

Lakeview primary—In block bounded by Plymouth and Grafton Sts., Golden State and Holloway Aves., 16 classrooms; estimated cost, $100,000.

Jackson primary—Site to be acquired north of Panhandle, between Stanyan and Baker Sts., 16 classrooms; estimated cost, $100,000.

Cleveland primary—Site to be acquired in district bounded by Persia and Brazil Aves., Athens and Moscow Sts., 12 classrooms; estimated cost, $75,000.

Starr King primary—San Bruno Ave., near 25th St., 16 classrooms; estimated cost, $75,000.

F. J. McCoppin primary—Sixth Ave., between B and C Sts., 16 classrooms; estimated cost, $100,000.

"CLASS A" HIGH SCHOOLS.—Girls—Scott St., between O'Farrell and Geary, not less than 20 classrooms; estimated cost, $450,000.

Lowell—Octavia St., between Bush and Sutter, not less than 20 classrooms; estimated cost, $450,000.

Commercial—Grove St., between Larkin and Polk, not less than 20 classrooms; estimated cost, $190,000.

Addition to Mission High—On site to be acquired in Church St., between Dorland and 18th, adjacent to present school; class "C" building; estimated cost, $150,000.

QUEBEC, QUE.—We are officially advised that the CANADIAN STEWART CO., Ltd., Lovereign Bank Bldg., Montreal, has secured contract to construct a 7-story addition to the Chateau Frontenac in this city, for the Canadian Pacific Ry. Co. Estimated cost, $500,000.

WATER SUPPLY—IRRIGATION.

(denotes that this work is advertised in Engineering News.)*

HOOKSETT, N. H.—This town has voted to install water system, at cost of $60,000, and hydrants and a complete fire service, at an estimated cost of approximately $150,000. John C. Dutton is Town Clk.

*HOLYOKE, MASS.—Bids are asked until 1.30 p. m., April 10, by the Board of Public Works for cast-iron pipe and special castings. Oscar C. Ferry is Asst. Clk. Bd.

MARION, MASS.—AUGUSTUS A. COBB, Marion, was awarded the contract on March 16 by the Water Commissioners for constructing the pumping station and shed for the Marion water-works, at $3,229. Louis E. Hawes, Marion, is Engr.

PROVIDENCE, R. I.—The contract for furnishing 300 tons 24-in., 385 tons 20-in., 27 tons 12-in. cast-iron water pipe, and about 23 tons special castings, was awarded on March 13 by the Committee on Water to ALLEN & REED, Providence, at $17,000.

*OSWEGO, N. Y.—Bids are asked by the Department of Water until noon, April 7, for furnishing and delivering cast-iron pipe and special castings for the Lake Water extension.

Bids are asked by the Water Department until noon, April 8, for furnishing the labor and material (with the exception of the cast-iron pipe and special castings) necessary for constructing an intake crib and a cast-iron intake pipe 30 ins. in diameter, in Lake Ontario, for the municipal pumping plant.

Bids are asked by the Department of Water until noon, April 14, for furnishing the labor and material (with the exception of the cast-iron pipe and special castings) necessary for laying the cast-iron pipe and special castings for the Lake Water extension. F. W. Ormsby is Secy. Dept.

*WHITE PLAINS, N. Y.—Bids are asked until noon, April 17, by John Heeney, Supt. Bd. of Water Comrs., for installing a 2,000,000-gallon triple expansion direct acting condensing pumping engine, erected on foundation in pumping station, Orchard St., White Plains.

BROOKLYN, N. Y.—Plans for repairing the Millburn reservoir in Nassau County are being prepared by J. W. McKay, Acting Ch. Engr. of the Department of Water Supply, Gas and Electricity.

NEW YORK, N. Y.—Bids are asked until 2 p. m., April 1, by John H. O'Brien, Comr. Water Supply, Gas and Electricity, for furnishing and delivering 12-in. inside screw gate valves, cast-iron water pipe, branch pipe and special castings, dock hydrants and appurtenances, and hauling and laying and furnishing, delivering and laying water mains in various streets; also for furnishing and delivering iron castings and completing the work to be done in furnishing, delivering, erecting and conecting four water-tube boilers at the new Ridgewood pumping station.

ROCHESTER, N. Y.—The contract for furnishing cast-iron pipe and special castings has been awarded by the Water Department to the WARREN FOUNDRY & MACHINE CO., Utica, N. Y., at $55,340. This contract includes 1,600 tons of 36-in. straight pipe, 300 tons of 6, 8, 10 and 12-in. pipe, 80 tons of special castings, 24 to 36-in., and 30 tons of castings, 6 to 20-in.

*STAATSBURGH, N. Y.—Bids are asked until noon, April 4, by Harry C. Barker, Atty., 54 Market St., Poughkeepsie, N. Y., for the construction of a water-works plant for the Staatsburgh Water Co. The division of work and materials to be furnished are approximately as follows: A storage reservoir complete, 4,500 ft. riveted steel pipe, 11,000 ft. cast-iron pipe, valves, gates and hydrants, trenching, setting valves, hydrants, etc. B. H. Brevoort, 54 Market St., Poughkeepsie, N. Y., is Engr.-in-Charge.

PARK RIDGE, N. J.—The contract for rebuilding the dike well, reinforcing and raising the height of the dam, building concrete spillway, etc., for the electric lighting station at Park Ridge, has been awarded by George T. Hanchett, Consulting Engr., to GEORGE C. BENNETT, Park Ridge, at $10,000.

RAHWAY, N. J.—The U. S. CAST-IRON PIPE & FOUNDRY CO., 71 Broadway, New York, has been awarded the contract by the Water-Works Department for 4 and 6-in. pipe, at $23.70 per ton, and specials at 2½ cts. per lb.

GLOUCESTER CITY, N. J.—The contract for the construction of water mains, with valves, valve boxes and fire hydrants in various streets, has been awarded by the city to JOHN O'NEIL, Burlington, N. J. ,at $4,334. John J. Mannion is City Clk.

*PHILADELPHIA, PA.—The following bids were received on March 17 by William R. Knight, Jr., Acting Dir. Pub. Wks., for two centrifugal pumping engines of 5,000,000-gallons daily capacity, driven by steam turbines for the Torresdale filter plant: Walter Wood, Sixth and Chestnut Sts., Philadelphia, $5,850; alternative style of turbine engines, $5,070; Watson, Stillman & Co., $5,700; D'Oller Engineering Co., 121 South Eleventh St., Philadelphia, $6,475; Dravo, Doyle & Co., $6,510; Allis-Chalmers Co., Milwaukee, Wis., $9,730.

HARRISBURG, PA.—The Ferro-Concrete Co., Harrisburg, was the low bidder, at $112,000, for the construction of the large storage reservoir on Paxton Creek, near this city. The dam will be of reinforced concrete with regulating gates so that there will be a continual flow down stream. M. B. Cowden is City Engr.

POTTSTOWN, PA.—The Pottstown Water Co. has increased its capital stock from $225,000 to $400,000, the increase to be used for constructing a filter plant and for the improvements to the Washington Hill reservoir.

MOUNT WASHINGTON, MD.—The Valley Artesian Water Co. has been incorporated by Edward L. Gernand, 211 North Calvert St. Henry Gilligan, 809 Calvert Bldg., is interested.

BIG STONE GAP, VA.—The city has awarded the contract to W. W. TAYLOR for the completion of the reservoir, construction of which was commenced several years ago, at $5,000.

ATLANTA, GA.—THE WISCONSIN ENGINE CO., Corliss, Wis., has been awarded the contract by the city for furnishing a pump for the pumping station at $137,000. R. M. Clayton is City Engr.

NEW ORLEANS, LA.—Swamp land to the extent of 28,000 acres in St. Charles Parish and 10,000 acres in Paradais will be drained in the near future. This will necessitate constructing 12½ miles of canal, 30 ft. wide at the top and 23 ft. at the bottom, and from six to eight feet deep, diking and ditching. G. A. McWilliams, Walnut, Ill., is interested.

MALTA, OHIO.—Bids are asked until noon, April 28, by the Board of Public Affairs for a pipe system for the water-works system. Frank C. Miller is Pres. Bd.

PLEASANT HILL, OHIO.—The citizens have voted $25,000 bonds for the construction of water-works.

TOLEDO, OHIO.—The U. S. Cast-Iron Pipe & Foundry Co., 71 Broadway, New York, submitted lowest bid for furnishing 565 tons of 6 to 14-in. cast-iron pipe at $22.90 a ton, and 35 tons 4-in. pipe at $23.90.

*CINCINNATI, OHIO.—Bids are asked until noon, April 2, by the Board of Public Service for manufacturing, furnishing and delivering cast-iron pipe and special castings for the water-works distribution system. John J. Wenner is Clk. Bd.

*ELKHART, IND.—No bids were received on March 11 by the Board of Public Works for furnishing the city and inhabitants with water for a period of 25 years. T. G. Wilkinson is City Clk.

GRAND RAPIDS, MICH.—We are officially advised that the LYNCHBURG FOUNDRY CO., Lynchburg, Va., was awarded the contract for furnishing the city with 4 to 16-in. pipe and specials at $18,929. Other bidders were: American Car & Foundry Co., Lincoln Trust Bldg., St. Louis, Mo., $19,303; U. S. Cast-Iron Pipe & Foundry Co., 71 Broadway, New York, $19,353; Dimmick Pipe Co., Birmingham, Ala., $19,199; American Cast-Iron Pipe Co., Birmingham, Ala., $20,382; Massillon Iron & Steel Co., Massillon, Ohio, $19,508.

CHICAGO, ILL.—Bids are asked by the City until 11 a. m., March 30, for furnishing and installing two engines and generators in the 39th St. pumping station and two in the Lawrence Ave. station. John J. Hanberg is Comr. Pub. Wks.

MILWAUKEE, WIS.—R. J. HICKEY was awarded the contract on March 11 by the City for laying all water mains during 1908. Charles G. Poetsch is City Engr.

FORT DODGE, IOWA.—The contract for laying 39,550 ft. of the drains upon the County Poor Farm has been awarded by the County Commissioners to the TUSCOLA SUPPLY & CONSTRUCTION CO., Tuscola, Ill. H. S. Holm is County Audr.

MUSCATINE, IOWA.—THE DIMMICK PIPE CO., Birmingham, Ala., was awarded the contract on March 18 by the Board of Water Works Trustees for laying water mains at about $10,000. J. J. Ryan is City Engr.

ELWOOD, NEB.—Bids are asked by the City until 8 p. m., March 27, for the construction of a water-works system here.

CHEYENNE, WYO.—THE AMBURSEN HYDRAULIC CONSTRUCTION CO. has been awarded the contract by the La Prele Ditch & Reservoir Co. for the construction of a reservoir in the La Prele creek. The reservoir when completed will cover 455 acres, an average depth of 53 ft., and will contain at one filling 25,000 cu. ft. of water. The system comprises about 26 miles of main ditch by means of which it is expected to irrigate and reclaim 36,000 acres of land. The type of dam to be constructed will be the bulkhead type, 135 ft. high and 285 ft. long, its construction requiring approximately 26,250 bbls. of cement, of 400 lbs. to the barrel, 75,000 ft. of rough lumber, 75,000 ft. of dressed lumber and 700,000 lbs. of steel. There will be 17,500 cu. yds. of crushed stone, 8,750 cu. yds. of sand and 17,500 cu. yds. of concrete. Estimated cost, $275,000.

GLASGOW, MONT.—See under Light and Power Plants.

PINE BLUFF, ARK.—See under Light and Power Plants.

PLATTEVILLE, COLO.—Bids are asked until April 1 by W. D. Egner, Town Clk., for material and labor for sinking a 4-in. soft-water well.

SPOKANE, WASH.—The Adrian Irrigation Co. has been reorganized and proposes to irrigate about 5,000 acres of land around Soap Lake, 112 miles from here. J. S. Lichty, Spokane, is interested.

PORTLAND, ORE.—Bids are asked until 2 p. m., April 15, by the U. S. Reclamation Service, Portland, for the construction of Clear Lake dam and dikes, located about 55 miles southeast of Klamath Falls, Ore., Klamath project, Oregon-California.

COLUSA, CAL.—The contract has been let to J. R. TENNANT for the completion of the last mile and a half of the 4-mile canal or irrigation ditch of the Colusa Irrigation Co., formerly the Goad Ditch Co. This ditch, which is ten feet wide at the bottom and 30 ft. wide at the top, will carry an average of four feet of water. The company is now arranging to put in a 20-in. centrifugal pump with a 100-HP. engine, that will pump 15,500 gallons per minute. It is to be in place and ready to open the headgate on June 1. This system wil irrigate more than 1,000 acres of land east and south of Colusa. The ditch part of the work will be completed by April 1. Later the canal may be continued to the Davis farm, situated near Sycamore, seven miles from the headgate of the canal.

LOS ANGELES, CAL.—THE NEPTUNE METER CO. was awarded the contract on March 9 by the Board of Water Commissioners for 1,000 Trident ⅝-in. water meters at $8,400. Hauer Hamlin is City Engr.

ELSINORE, UTAH.—Bids are asked until 6 p. m., April 1, by the Town Board for 20,000 ft. of 3-in. iron water pipe and 2,000 ft. of 1½-in. pipe and fittings, valves, etc.

PORTAGE LA PRAIRIE, MAN.—The City Council has decided to install a water-works system at an estimated cost of about $40,000.

VICTORIA, B. C.—Bids are asked until March 30 for supplying certain water meters. William W. Northcott is Purchasing Agt., City Hall, Victoria, B. C.

SEWERAGE.

(denotes that this work is advertised in Engineering News.)*

EXETER, N. H.—The citizens have voted to extend the sewerage system, including the construction of sewers in High, Park, Washington and other streets. John M. Wadleigh is Chn. Selectmen. A. W. Dudley, Manchester, N. H., is Engr.

SYRACUSE, N. Y.—The contract for the construction of an 8-in. pipe sewer in Burdick Ave., from the terminus of the present sewer to Court St., and an 8-in. pipe sewer in Court St., from North Third St. to the city line, has been let by the city to ALBERT GAFFEY, at $4,260.

BUFFALO, N. Y.—Bids are asked until 11 a. m., March 31, by the Department of Public Works for the construction of sewers in several streets. Francis G. Ward is Comr. Pub. Wks.

*AUBURN, N. Y.—We are officially advised that THOMAS VISCOUNT, 868 Flora St., Elizabeth, N. J., was awarded the contract on March 17 by the city for the construction of sewers in the Fourth, Fifth, Sixth and Seventh wards, at $81,488.

THE BECKWITH CO., Herkimer, N. Y., secured the contract for the construction of the sewage disposal plant, at $41,445. W. Thomas Wooley is City Engr. J. S. Hanlon is City Clk. Itemized bids will be given next week under Contract Prices.

*LAKE PLACID, N. Y.—Bids are asked until 1 p. m., April 9, by the Ruisseaumont Sewerage Commission, Lake Placid, for constructing about 2½ miles of pipe sewer.

GLOUCESTER CITY, N. J.—The contract for constructing a terra-cotta sewer has been awarded by the city to EDWARD J. O'HARA, Gloucester City, at $4,660. John J. Mannion is City Clk.

ERIE, PA.—Bids are asked until March 30 by the Board of Public Works for constructing sewer.

ALLENTOWN, PA.—Plans for the construction of the house sewerage system were submitted to the Council on March 17 by the City Engineer and adopted. Estimated cost, $987,000.

WOODLAWN, PA.—The State Health Commissioner, Harrisburg, Pa., has notified the Jones & Laughlin Steel Co., Pittsburg, Pa., to have plans prepared for the construction of a sewer system and a disposal plant here.

WASHINGTON, D. C.—The Commissioners of the District of Columbia have awarded the contract for the construction of an 800-ft. sewer to E. G. GUMMEL, 300 Rhode Island Ave., Washington, at $6,119. List of bidders noted March 19.

F. J. Boas, Philadelphia, Pa., is the lowest bidder, at $7,477 for the construction of a sewer system on the Walter Reed General Hospital reservation.

BURLINGTON, N. C.—Bonds for $100,000 have been issued for the construction of sewers and water-works. W. E. Sprague is Mayor.

*LOUISVILLE, KY.—E. G. NAVE BROS. & CO., Louisville, were awarded the contract on March 18 by the Commissioners of Sewerage, for the construction of Section "A" of the Beargrass intercepting sewer, at $91,699. J. B. F. Breed is City Engr. List of bidders noted last week.

LANCASTER, OHIO.—Bids are asked until noon, April 1, by the Board of Public Service for the construction of certain sewers in Storm Water Sewer District No. 3.

SANDUSKY, OHIO.—Plans have been completed for the construction of a sewer in Farwell St., to consist of 2,100 lin. ft. 20 × 40-in., 2,300 lin. ft. 20 × 30-in., and 2,600 lin. ft. 24 × 18-in. concrete sewer; 2,200 lin. ft. 18-in. double-strength vitrified pipe and 1,700 lin. ft. 15 and 12-in. vitrified pipe. Estimated cost, $33,000.

ASHTABULA, OHIO.—Council has approved plans for the construction of a sewer in West Prospect St., from West to Nathan Sts. on the south side of the tracks of the A. R. T. electric line. L. A. Amsden is City Engr.

COLUMBUS, OHIO.—The Council Committee on Finance on March 13 approved an ordinance providing for the issue of $75,000 bonds for the construction of sewers in Sullivant Ave., on the west side, and $25,000 for the construction of a sewer in Markison Ave., on the south side. Henry C. Maetzel is City Engr.

MINGO JUNCTION, OHIO.—THE CARNEGIE STEEL CO., Mingo Junction, has been awarded the contract by the Village Council for the construction of a concrete sewer at $12 per lin. ft. for 6-ft. concrete or reinforced sewer; 8-ft. sewer, $9; brick catch-basins, $70; brick manholes, $65; for 6-ft., and $85 for 8-ft. sewer.

DANVILLE, IND.—Bids are asked until 2 p. m., March 30, by William H. Nichols, County Auditor, for the purchase of one steel sewer.

JEFFERSONVILLE, IND.—Victor W. Lyon, City Engr., is preparing plans for the construction of a sewerage system.

MARTINSVILLE, IND.—The City Council has ordered the City Engineer to prepare plans for the construction of a large sewer in Jackson St.

JOLIET, ILL.—The Ross & Curtis Stone Co., Joliet, submitted the lowest bid on March 16 for the construction of a sewer system in the First Ward at $26,793.

WATSEKA, ILL.—G. C. Houston has prepared plans and specifications for the construction of 24-in. vitrified pipe sewers on the east side. Estimated cost, about $10,000. C. E. Matkin is City Clk.

JOLIET, ILL.—The Board of Local Improvements will probably soon ask for bids for constructing sewers and water mains in the Seventh Ward, at an estimated cost of $75,000.

LAKEMILLS, WIS.—F. E. KOMINSKI, Berlin, Wis., has been awarded the contract for the construction of 771 ft. of 8-in. and 1,229 ft. of 6-in. vitrified pipe sewers, six manholes and one lamphole in sewerage district No. 2. N. H. Falk is City Clk.; W. G. Kirchoffer is Consulting Engr., 31 Vroman Bldg., Madison, Wis.

WAUKESHA, WIS.—Bids are asked until 2 p. m., April 3, by the Board of Public Works for the construction of several sections of pipe sewers.

DAVENPORT, IOWA.—The City Engineer has compelted surveys for the construction of a sewer in the west end.

CLINTON, IOWA.—The lowest bid opened on March 12 for constructing sewers at Clinton was submitted by the People's Construction Co., Davenport. Estimated cost, $200,000.

DULUTH, MINN.—Bids are asked until March 27 by the Board of Public Works for constructing a sanitary main trunk sewer in Elinor St. and 49th Ave. R. Murchison is Clk Bd.

ST. PAUL, MINN.—CHRIST JOHNSON has been awarded the contract by the city for the construction of a sewer in Park Ave. from Sycamore St. to Atwater St., and in Lytton Place from Rice to Sylvan Sts., at $3,521. Andrew Rinker is City Engr.

WICHITA, KAN.—Bids are asked until 5 p. m., April 6, by the City Clerk for the construction of a sanitary sewer in District No. 9.

FARGO, N. DAK.—Bids are asked until 5 p. m., April 6, by N. C. Morgan, City Audr., for constructing a 12-in. lateral sewer in Fourth St.

SPRINGFIELD, MO.—Bids are asked by the City Clerk until April 7 for constructing 1,474 ft. 8-in. pipe in sewer district No. 12 of section No. 4. H. G. Horton is City Engr.

ST. LOUIS, MO.—Bids are asked until noon, April 3, by the Board of Public Improvements for the construction of Glaise Creek sewer. H. R. Fardwell is Secy. Bd.

ALAMOSA, COLO.—Bids are asked until 4 p. m., April 15, by Henry C. Mullins, Mayor, for constructing a sanitary sewer.

SEATTLE, WASH.—We are officially advised that the only bid submitted on March 21 to the Board of Public Service for the construction of the Green Lake branch of the North Trunk sewer was that of Grant Smith & Co., at $931,462 for brick, and $926,254 for concrete. R. H. Thomson is City Engr.

OAKLAND, CAL.—The STANLEY CONSTRUCTION CO. has been awarded contract, at about $10,000, for building storm sewer in Grand Ave. F. C. Turner is City Engr.

PASADENA, CAL.—The city has voted to issue $50,000 of bonds for the improvement of sewers.

PETALUMA, CAL.—The contract for laying a 16-in. sewer in Western Ave. a distance of 1,150 ft., has been awarded by the city to H. LE CAM at the following prices: For 8-in. pipe, 74 cts. per lin. ft.; 16-in. pipe, $1.38 per lin. ft.; manholes, complete, $33 each; catchbasins and connections complete, $41.50 each.

SAN FRANCISCO, CAL.—The contract for laying a sewer in Folsom St., from Jefferson to Cortland Aves., has been awarded by the city to MAHONEY BROS., at the following prices: For constructing 8-in. vitrified salt glazed ironstone pipe sewer, $1.90 per lin. ft.; brick manhole with cast-iron cover and galvanized wrought-iron steps, $90 each; furnishing and setting Y branches on 8-in. vitrified salt glazed ironstone pipe sewer, $1.50 each extra. Marsden Manson is City Engr.

SELMA, CAL.—W. H. Shafer, C. E., has estimated the cost of the construction of a sewer system here, at $49,579. The report was accepted by the Town Trustees and a resolution favoring a bond election was adopted.

SANTA MONICA, CAL.—On March 12 the City Council let the contract for the construction of the asceptic sewer tank to the CALIFORNIA ORNAMENTAL BRICK CO., Los Angeles, at $4,847.

SALT LAKE CITY, UTAH.—Bids are asked until 8 p. m., April 3, by the Board of Public Works for constructing pipe sewers in sewer extensions Nos. 192, 194 and 198. H. G. McMillan is Chn. Bd. Louis C. Kelsey is City Engr.

The Board of Public Service has recommended that the contract for sewer extension No. 132 be awarded to Strange & McGuire at $6,159.

GARBAGE DISPOSAL.

(** denotes that this work is advertised in Engineering News.*)

MALDEN, MASS.—The contract for the disposal of house offal for a period of three years has been awarded to LEVI ELMS, Forest St., Melrose, at $1,800 per year. Thomas P. Powell is Supt. Dept. of Health.

NEW HAVEN, CONN.—All bids were rejected on March 18, by the Department of Public Works for sprinkling the streets in Wards Nos. 1 to 12. The bidders were: The New Haven Car Sprinkling Co., $8,434; Frank A. Brazos, $7,500. F. W. Foley is Dir. Pub. Wks.

PITTSBURG, PA.—THE AMERICAN REDUCTION CO., 1516 Second Ave., Pittsburg, was awarded the contract on March 18 by the city for collecting and disposing of the city's garbage for the year beginning April 1 at $186,000. This is exclusive of the contract for the North Side (formerly Allegheny), which contract does not expire now.

SCRANTON, PA.—The following bids were received on March 14 by F. L. Wormser, Dir. Dept. Pub. Safety, for the collection and disposal of the city's garbage: P. F. Cummings, 306 Connell Bldg., Scranton, $96,000; William J. O'Malley, Scranton, $88,773; The United Contract Co., Philadelphia, Pa., $82,400; George W. Ruch, 2851 Hutchinson St., Philadelphia, Pa., (three bids) (a) $88,773 (average bid per year); (b) first year, $126,000; second year, $75,500; third year, $79,000; fourth year, $82,300; fifth year, $86,000; (c) first year, $121,000; second year, $75,500; third year, $79,000; fourth year, $82,300; fifth year, $86,000.

STREETS AND ROADS.

(** denotes that this work is advertised in Engineering News.*)

BUFFALO, N. Y.—The Council has directed Francis G. Ward, Comr. of Pub. Wks., to prepare plans and specifications for repaving Elm St., 40 ft. wide, from the north curb of Swan St. to the south curb of Clinton St.; South Division St., 32 ft. wide, from the east curb line of Ellicott St. to the west curb line of Cedar St., except the crossings of Elm and Michigan Sts.; Eagle St., 32 ft. wide, from the west curb line of Pine St. to the grade crossing approach near Emslie St., except the crossings of Spring and Jefferson Sts.; Hickory St., 30 ft. wide, from the north curb line of Swan St. to the south curb line of Williams St., except the crossings of North Division and Eagle Sts.; Cedar St., 28 ft. wide, same as above and ordered that North Division St. be repaved, 32 ft. wide, with Trinidad asphalt, from the east curb line of Michigan St. to the west curb line of Spring St., and Custer St. be macadamized from Main St. to the property of the Delaware, Lackawanna & Western Railway Co.

BROOKLYN, N. Y.—Bids are asked until 3 p. m., April 9, by the Park Board, New York, for furnishing and delivering crushed trap rock and trap rock screenings on parkways, limestone and limestone screenings in parks and on parkways, Hudson River road gravel in parks and on parkways, Boro. of Brooklyn. Henry Smith is Pres. Bd.

BROOKLYN, N. Y.—Bids are asked by Bird S. Coler, Boro. Pres., until 11 a. m., April 8, for laying cement sidewalks on the north side of St. Marks Ave., between Buffalo and Ralph Aves., and on various other streets in the Borough of Brooklyn.

BUFFALO, N. Y.—Bids were received on March 11 by the Department of Public Works for repaving portions of Rhode Island St., Zittle St., Glenwood Ave., Hoffman Alley and Saybrook St. on the following specifications: (A) "A"; (B) "B," on macadam base; (C) "B" on concrete base. The bidders were as follows:

For repaving Rhode Island St., 13,686 sq. yds.—(A) with German Rock Co.'s standard asphalt, German Rock, Asphalt & Cement Co., Ltd., Morgan Bldg., Buffalo, $30,246 (low bidder); with genuine Trinidad pitch lake asphalt, Barber Asphalt Paving Co., 330 Ellicott Sq., Buffalo, $34,078. For (B) with dressed block Medina sandstone, Frank V. E. Bardol D. S. Morgan Bldg., Buffalo, $73,000; Louis H. Gipp Construction Co., 531 Ellicott Ave., Buffalo, $52,750 (low). With round edge fire clay brick, Frank V. E. Bardol, $55,000; Louis H. Gipp Construction Co., $36,750 (low). With round edge shale brick, Frank V. E. Bardol, $55,000; Louis H. Gipp Construction Co., $35,750 (low). For (C)—With dressed block Medina sandstone, Frank V. E. Bardol, $73,000; Louis H. Gipp Construction Co., $52,750 (low). With round edge fire clay brick, Frank V. E. Bardol, $52,000; Louis H. Gipp Construction Co., $36,750 (low). With round edge shale brick, Frank V. E. Bardol, $51,000; Louis H. Gipp Construction Co., $35,750 (low). With German Rock Co.'s standard asphalt, German Rock A. & C. Co., Ltd., $34,890 (low).

For paving Zittle St., 2,904 sq. yds.: For (B)—With round edge fire clay brick, Frank V. E. Bardol, $8,900 (low); Louis H. Gipp Construction Co., $9,750. With round edge shale brick, Frank V. E. Bardol, $8,900 (low); Louis H. Gipp Construction Co., $9,275. For (C)—With round edge fire clay brick, Frank V. E. Bardol, $8,400 (low); Louis H. Gipp Construction Co., $9,750. With round edge shale brick, Frank V. E. Bardol, $8,400 (low); Louis H. Gipp Construction Co., $9,275; German Rock A. & C. Co., Ltd., $9,640; Joseph F. Stabell Co., 1125 Niagara St., Buffalo, $11,265; John Miller (informal; bond not approved by Mayor), $9,400. With German Rock Co.'s standard asphalt, German Rock A. & C. Co., Ltd., $9,350 (low). With genuine Trinidad pitch lake asphalt, Barber Asphalt Paving Co., $9,874.

For repaving Glenwood Ave., 2,257 sq. yds.: For (A)—With German Rock Co.'s standard asphalt, German Rock A. & C. Co., Ltd., $5,550. With genuine Trinidad pitch lake asphalt, Barber Asphalt Paving Co., $5,034 (low). For (B)—With dressed block Medina sandstone, Louis H. Gipp Construction Co., $9,275 (low). With round edge fire clay brick, Frank V. E. Bardol, $7,600; Louis H. Gipp Construction Co., $6,575 (low). With round edge shale brick, Frank V. E. Bardol, $7,600; Louis H. Gipp Construction Co., $6,275 (low). For (C)—With dressed block Medina sandstone, Louis H. Gipp Construction Co., $9,275 (low). With round edge fire clay brick, Frank V. E. Bardol, $7,600; Louis H. Gipp Construction Co., $6,575 (low). With round edge shale brick, Frank V. E. Bardol, $7,600; Louis H. Gipp Construction Co., $6,275 (low).

For paving Hoffman Alley, 518 sq. yds.: (B)—With dressed block Medina sandstone, Frank V. E. Bardol, $3,300 (low). With round edge fire clay brick, Frank V. E. Bardol, $2,500 (low); Louis H. Gipp Construction Co., $2,575. With round edge shale brick, Frank V. E. Bardol, $2,500 (low); Louis H. Gipp Construction Co., $2,500 (low). For (C)—With dressed block Medina sandstone, Frank V. E. Bardol, $3,300 (low). With round edge fire clay brick, Frank V. E. Bardol, $2,500; Louis H. Gipp Construction Co., $2,575; Joseph F. Stabell Co., $2,460 (low). With round edge shale brick, Frank V. E. Bardol, $2,500; Louis H. Gipp Construction Co., $2,500; Joseph F. Stabell Co., $2,460 (low). With German Rock Co.'s standard asphalt, German Rock A. & C. Co., Ltd., $2,260. With genuine Trinidad pitch lake asphalt, Barber Asphalt Paving Co., $2,175 (low).

For macadamizing or paving Saybrook Place, 2,381 sq. yds.: For macadam—Frank V. E. Bardol, $5,900; Louis H. Gipp Construction Co., $6,000; Joseph F. Stabell Co., $4,778; John Miller (informal, bond not approved by Mayor), $5,700. For (B)—With round edge fire clay brick, Frank V. E. Bardol, $9,200 (low); Louis H. Gipp Construction Co., $9,500. With round edge shale brick, Frank V. E. Bardol, $9,200 (low); Louis H. Gipp Construction Co., $9,200 (low). For (C)—With round edge fire clay brick, Frank V. E. Bardol, $8,700 (low); Louis H. Gipp Construction Co., $9,500. With round edge shale brick, Frank V. E. Bardol, $8,700 (low); Louis H. Gipp Construction Co., $9,200. With German Rock Co.'s standard asphalt, German Rock A. & C. Co., Ltd., $7,619 (low). With genuine Trinidad pitch lake asphalt, Barber Asphalt Paving Co., $8,452.

BUFFALO, N. Y.—Bids are asked until 11 a. m., April 1, by the Department Public Works for repaving various streets. Francis G. Ward is Comr. Pub. Wks.

CORNING, N. Y.—Bids were opened as follows, on March 5, by the Public Works Department, for about one mile of brick paving: (a) 10,850 cu. yds. excavation, including haul; (b) 12,775 lin. ft. concrete curb, and gutter, 7 ins. high, 6 ins. wide; (c) 1,665 lin. ft. protection curb, headers, concrete gutters, 18 ins. wide, 11 ins. deep; (d) 16,250 sq. yds. brick paving, 6-in. concrete in sand cushion; (e) 4,500 sq. yds. macadam, 7 ins. average depth; (f) totals; McGREEVY, McGUIGAN & BAUM, Elmira, N. Y., (a) 35 cts. (b) 60 cts., (c) 35 cts., (d) $1.69, (e) 70 cts., (f) $42,658 (awarded contract); McGreevy Construction Co., Ithaca, N. Y., (a) 30 cts., (b) 57 cts., (c) 40 cts., (d) $1.80, (e) 94 cts., (f) $44,683; Hassam Paving Co., Worcester, Mass., (a) 40 cts., (b) 56 cts., (c) 35 cts., (d) $1.89, (e) 53 cts., (f) $45,174; F. C. Lauer & Sons Co., Rochester, N. Y., (a) 42 cts., (b) 54 cts., (c) 24 cts., (d) $1.80, (e) $1.18, (f) $46,415; John F. Kerwin & Co., New Brunswick, N. J., (a) 47 cts., (b) 52 cts., (c) 58 cts., (d) $1.92, (e) 78 cts., (f) $47,418; Jehiel Vaughn, Stanford, N. Y., (a) 46 cts., (b) 60 cts., (c) 30 cts., (d) $1.90, (e) 80 cts., (f) $47,630; Kaumeier Bros., Port Huron, Mich., (a) 36 cts., (b) 60 cts., (c) 41 cts., (d) $1.89½, (e) $1.10, (f) $47,997; Foote Bros., Nunda, N. Y., (a) 38 cts., (b) 70 cts., (c) 30 cts., (d) $1.90, (e) 95 cts., (f) $48,715; Dollard & Heller, Albany, N. Y., (a) 35 cts., (b) 70 cts., (c) 35 cts., (d) $1.87½, (e) $1.28, (f) $49,551; E. Seyboldt, Geneva, N. Y., (a) 30 cts., (b) 73 cts., (c) 50 cts., (d) $1.95, (e) $1.25, (f) $50,726; Lewis & Moynehan, Herkimer, N. Y., (a) 40 cts., (b) 90 cts., (c) 80 cts., (d) $2.05, (e) $1.50, (f) $57,232. Robert H. Canfield is Supt Pub. Wks.

PATERSON, N. J.—Portions of Clark, Fair, Prince and Smith Sts. and Hamilton Ave. may be paved with asphalt; portions of Essex, Fair, Godwin and Governor Sts. and Hamilton Ave. with asphaltic macadam and Carroll St., from Broadway to Park Ave., with wood block. Estimated cost, about $95,000. H. J. Harder is City Engr.

The following are the bids opened March 11 by Board Chosen Freeholders for grading and macadamizing Midvale road from Boardville to West Milford Township line: Francisco Bros., $48,098; J. S. Sowerbutt, $52,360; E. C. Humphrey & Co., $57,379; Wright & Lindsley, $60,644; Robert Doriety, $68,471; Geo. F. Brackett, $43,889, and John C. Tierney, Hoboken, N. J., $43,442 (recommended for contract).

WASHINGTON, N. J.—Bids are asked until 11 a. m., April 2, by Joseph R. Thatcher, Dir. Roads, Washington, for constructing 2.6 miles of stone road for Warren County.

*FREEHOLD, N. J.—Bids are asked by William B. Conover, Dir. Bd. Chosen Freeholders, until 11 a. m., April 13, to build stone road extension from the Avenue of Two Rivers and Rumson Road to the Sea Bright bridge; length, 4,041 ft.

WASHINGTON, PA.—Bids are asked until April 2, by Joseph W. Hunter, State Highway Comr., Harrisburg, Pa., for constructing 13,242 ft. road in North Strabane Township, Washington County.

HAZELDELL, PA.—Bids are asked until April 3, by R. K. Lape, Secy. Council, for grading North St., between Wampum Ave. and Orchard St., and Orchard St., between North St. and Bridge St.

WASHINGTON, PA.—Bids are asked by the County Commissioners until noon, April 16, for the construction of improved county roads, culverts and bridges on them. William Wylie is County Engr.

AVALON, PA.—Bids are asked until 6 p. m., March 31, by the McBride Surveying & Engineering Co., Ltd., Borough Engrs., for grading, paving and curbing various streets.

CANONSBURG, PA.—Bids were received on March 16 by the Town Council as follows for paving the East College St. extension: Taylor & Crawford, Canonsburg, grading, 40 cts. per cu. yd.; curbing, 60 cts. per lin. ft.; curbing, concrete, 40 cts.; paving, $1.30 to $1.50 per cu. yd., according to make of brick. John McNary, Canonsburg, grading or excavating, 35 cts. per cu. yd.; curbing 62 cts. per lin. ft.; paving, $1.50 to $1.56 per cu. yd., according to make of Brick. RIDGE BROS., Pittsburg, Pa., grading or excavating, 50 cts. per cu. yd.; curbing, 75 cts. per lin. ft.; paving, $2.10 per cu. yd.

SCRANTON, PA.—The Warren Quinlan Co. submitted the lowest bid on March 16 to the Board Public Service for paving Capouse Ave., at $2.44 per sq. yd. Charles R. Acker is Dir. Pub. Wks.

PYLESVILLE, MD.—Bids are asked until noon, March 30, by the County Commissioners, Hartford County, for improving the public highway between Pylesville and Wilson Cross Roads. W. A. Wheeler is Clk., Comrs.

WASHINGTON, D. C.—Bids are asked until noon, April 4, by Capt. H. L. Pettus, Q. M., U. S. A., for the construction of macadam roads, pavements, concrete walks, gutters, curbing, etc., in the Walter Reed Army General Hospital Reservation, Washington.

*PETERSBURG, VA.—Bids are asked until noon, April 6, by the Street Commission, in care of R. D. Budd, City Engr., for the construction of from 4,000 to 6,000 sq. yds. of vitrified block pavement on Washington St., between Sycamore St. and Market St.

ATLANTA, GA.—Contracts for material for street improvements were awarded on March 13 by the Street Commission as follows. CHATTAHOOCHEE BRICK CO., brick for sidewalks, at $8.50 per M.; VENABLE BROS., rubble stone, at 60 cts. per ton; R. O. CAMPBELL, cement, at 41 cts. per 100 lbs.

JACKSONVILLE, FLA.—Bids are asked until March 27 by C. Benedict, Chn. Bd. County Comrs., for paving with macadam or oyster shell three miles of the Turner Road. Gail L. Barnard is County Engr.

DECATUR, ALA.—The BREEDING CONCRETE CO., Chattanooga, Tenn., has been awarded the contract for constructing several miles of concrete sidewalks for the city.

BROOKHAVEN, MISS.—The GIBSON PAVING CO., Jackson, Miss., has been awarded the contract for constructing five miles of cement sidewalks.

SWEETWATER, TENN.—Bids are asked until 6 p. m., April 10, by the Board of Mayor and Aldermen for grading, macadamizing, and laying concrete sidewalks, curb and gutter on about two miles of streets. S. T. Jones is Mayor.

CLEVELAND, OHIO.—Bids are asked until noon, April 2, by the Board Public Service for grading, draining, curbing, paving with brick, and improving various streets and roads. A. R. Callow is Secy. Bd.

WEST MILTON, OHIO.—Bids are asked until 10 a. m., April 3, by E. E. Pearson, Troy, Ohio, County Audr., for constructing 2,800 lin. ft. macadam road, known as the Horse Shoe Bend Improvement.

LISBON, OHIO.—The contract for grading the highway leading from East Liverpool, Ohio, to Lisbon, 38,211 cu. yds., has been awarded to JOHN McLAUGHLIN, East Liverpool, Ohio. C. H. Cobourn is County Audr.

MIDDLETOWN, OHIO.—The contract for paving Yankee Road (bids opened Feb. 25) has been awarded by the Board of Public Service to ANDREWS ASPHALT PAVING CO., of Hamilton, Ohio, at $18,610. John Kuntz is Clk. Bd.

ASHLAND, OHIO.—Bids are asked until noon, April 20, by the Council for grading, paving and curbing West Eighth St. A. P. Black is Clk.; E. L. Berry is Engr.

FRANKFORT, IND.—Bids are asked until 2 p. m., April 7, by Charles F. Cromwell, County Audr., for the construction of 20 miles of gravel roads.

VALPARAISO, IND.—O. P. TABER, Remington, Ind., has been awarded the contract at $6,475 for the construction of the Blake Road in Portage Township.

JACOB ACKERMAN, Laporte, Ind., secured the contract at $8,275 for the construction of the Hazen Road in Center Township.

MONTICELLO, IND.—The contract for constructing a stone road in Princeton Township has been awarded to WERN & SPENCER, Wolcott, Ind., at $12,438. J. L. Ackerman is County Audr.

WASHINGTON, IND.—Bids are asked by the Commissioners of Daviess County until 10 a. m., April 7, for the construction of four gravel roads, Road No. 1, known as the Hardy Road; No. 2, known as the McCall Road; Road No. 3, known as the Abel Road, and Road No. 4, known as the Carrell Road. Thomas Nugent is County Audr.

INDIANAPOLIS, IND.—HETHERINGTON & BERNER, 19 West South St., Indianapolis, have been awarded the contract by the Board Public Service for the erection and equipment of the municipal asphalt repair plant, at about $15,625. Blaine H. Miller is City Engr.

ELKHART, IND.—All bids for the construction of brick pavement with combination concrete curb and gutter on South Main St., from Prairie St. to the city limits, were rejected on March 16 by the Board Public Works, as excessive. A. M. Smith is City Engr.

DELPHI, IND.—Bids are asked until noon, April 6, M. G. Hann, County Audr., for the construction of gravel roads in Burlington Township.

GRAND RAPIDS, MICH.—Bids are asked until April 2 by the city for 4,260 sq. yds. of bituminous macadam pavement. L. W. Anderson is City Engr.

LA SALLE, ILL.—Bids are asked by the city until 2 p. m., April 1, for 772.5 cu. yds. of excavating and grading. W. A. Panneck is Mayor.

OAK PARK, ILL.—B[illegible] are asked until 8.30 a. m., April 2, by B[illegible] Local Improvements for the construc[illegible] asphalt pavement and granite comb[illegible] curb and gutter on Oak Park Ave. B. C[illegible]dstadt is Secy. Bd.

*PEORIA, ILL.—Bids [illegible] asked until 2 p. m., April 14, by E. [illegible]rry, Comr. of Pub. Wks., for repairin[illegible] asphalt streets (2,000 sq. yds., approx[illegible]) in the city.

WATERTOWN, WIS.—[illegible] DUNN, Cleveland, Ohio, has been a[illegible] the contract by the city for street [illegible] at $39,000.

LINCOLN, NEB.—B[illegible] asked by Thomas H. Pratt, City [illegible] until noon, March 28, for grading, [illegible] and paving.

DEVILS LAKE, N. DA[illegible]ds are asked by Ole Skratass, City A[illegible] until 8 p. m., April 6, for the constru[illegible] sidewalks.

SEDALIA, MO.—The C[illegible] has directed estimates to be prepared [illegible]ving certain portions of East Fifth a[illegible] Third Sts. with brick on a concrete [illegible]tion.

ST. CHARLES, MO.—H[illegible]AN & WETTER, St. Charles, have [illegible] awarded the contract by the city for 9[illegible] yds. brick paving on 6 ins. 1:3:5 [illegible]e and 1-in. sand cushion, at $1.58 per [illegible]d.; 3,153 cu. yds. earth excavation, at 40 [illegible] H. E. Steinmann is City Engr.

HANNIBAL, MO.—SMIT[illegible]ERTTE have been awarded the contract b[illegible] J. A. Meyer and C. F. Garner for 19,0[illegible] yds. granitoid on Virginia St. in fr[illegible] their property.

HOUSTON, TEX.—The f[illegible]ng contracts have been awarded by th[illegible]rris County Commissioners: SUDERM[illegible] DOLSON & CO., Houston, for paving 5[illegible]iles of Katy road with gravel and surfa[illegible] with redfish shell, at $32,951; TEXAS [illegible]ADING CO., Houston, for paving six m[illegible] of Stuebner Air Line road with clam sh[illegible], at $52,505; same firm, for paving 7,0[illegible] of Brunner Ave. road with crushed rock, at $10,452.

HOLLYWOOD, CAL.—The City Trustees on March 7 awarded the contract for macadamizing the east and center section, 2¼ miles, of the Sunset Boulevard, to P. A. HOWARD, at $67,450.

The contract for the west section was awarded to J. N. PATILLO, at $47,515.

PRESCOTT, ARIZ.—Bids are asked by the city until 7.30 p. m., April 6, for macadamizing Cortez St., from Gurley St. to Depot St. E. B. Moden is City Clk.

RENO, NEV.—Bids are asked until April 13 by H. E. Christie, City Clk., for grading and paving with asphalt portions of Center, Virginia, Plaza and Fourth Sts.

SALT LAKE CITY, UTAH.—Bids are asked by the Board Public Works until 8 p. m., April 3, for constructing cement sidewalks in sidewalk extension No. 130, and for hauling, excavating and laying stone block crosswalks. Louis C. Kelsey is City Engr.

MANUFACTURING PLANTS.

(** denotes that this work is advertised in Engineering News.*)

BANGOR, ME.—H. L. Day, Son & Co., of Bangor intend to construct a 5-story spring bed and mattress factory to be 104 × 60 ft.

WNCHENDON SPRINGS, MASS.—Nelson D. White & Sons, cotton manufacturers, Winchendon Springs, Mass., have awarded to J. W. BISHOP CO., 107 Foster St., Worcester, Mass., the contract for a $40,000 2-story brick weave mill, 303 × 55 ft. The building is expected to be ready for the looms Sept. 1, and the entire plant ready for operation Jan. 1.

BOSTON, MASS.—A. Johnson, Arch., has prepared plans for a factory for the Dahlquist Mfg. Co., Boston.

The Mark Sherwin Co. has been formed for the purpose of carrying on the wool and wool stock business on Atlantic Ave. Mark Sherwin is the Pres. of the concern, and is well known to the trade. The company has bought a building at 475 to 485 Atlantic Ave., and plans are now being prepared for alterations, to convert the 5-story brick structure into a wool house.

PROVIDENCE, R. I.—Contract for a brick addition to the factory on Pitman St., Providence, for the Colored Worsted Mills, for which Thomas Evans prepared plans, has been let to the F. G. ROWLEY CO., of Pawtucket, R. I.

A plant for manufacturing and dealing in special yarns made from ramie fiber for braids, plush, knitting, weaving and embroidery, is to be established at Providence, R. I., and the Rhea Yarn Co. has been organized for this purpose. W. F. Hodgson is agent, and it is reported that he will take charge of the mill as soon as it is completed. Robert Young is associated with him.

BRISTOL, CONN.—W. L. Barrett and C. C. Gauigns, of Bristol, Conn., have commissioned Max J. Unkelbach as Arch. for the proposed brick factory which they will erect at Bristol. The building will be three stories high, about 36 × 70 ft.

WATERBURY, CONN.—Plans by Theo. B. Peck, Arch., 65 Bank St., Waterbury, are well along for several new building to replace some of the older buildings of the Waterbury Mfg. Co., Waterbury, Conn. All buildings will be of brick, mill construction, and five or six stories high. Full details not decided as yet.

TORRINGTON, CONN.—Work on the new plant of the Warrenton Woolen Co. will begin as soon as weather conditions are favorable. The main factory will be a 2-story structure, 79 × 321 ft. Other structures will be a 1-story dyehouse, 43 × 132 ft., of concrete construction; a 2-story storehouse and repair shop, 44 × 144 ft., of brick; and a boiler and engine plant, 57 × 74 ft., of brick. Charles T. Main, 45 Milk St., Boston, Mass., is Engr. Noted on Feb. 27.

NEW LONDON, CONN.—Workmen are engaged in tearing down the old frame buildings on the Colt property on Water St. and after April 1 will begin to raze the buildings on the Huntington-Raymond property adjoining. The New England Carpet Lining Co. has purchased these two properties from the New London Gas & Electric Co. and will erect a mill, the contract for which has already been let to A. LINCOLN DEAN.

NIAGARA FALLS, N. Y.—The Ryder Patent Yarn Mfg. Co., of New York, may establish a branch at Niagara Falls, N. Y., for the manufacture of textile products. The company is negotiating for a site and desires to erect two buildings, each 800 × 75 ft., costing all told about $175,000. The plant would employ about 100 men.

Henry Birkmire, Arch., 396 Broadway, New York, has let mason contract to J. T. WOODRUFF & SON, 63 Third St., Long Island City, for a 5-story brick factory building, 46 × 200, to be built for Henry Franck, Sons & Co., Lawrence St., Flushing, L. I., $60,000.

BUFFALO, N. Y.—Plans have been prepared by W. H. Zadwadski, 1079 Broadway, Buffalo, for a soap factory for the Our Soap Co., 876 Fillmore Ave.

PATERSON, N. J.—Ground has been broken for a 2-story silk mill at Lower Preakness. The mill will be occupied by the Lower Preakness Silk Co., which has a capitalization of $30,000. The officers are: Jacob Van Driele, Pres.; Edward Perslo, Vice-Pres., and William J. Doremus, Secy. and Treas. The company will manufacture broad-silks exclusively.

PITTSBURG, PA.—General contract has been let by Edward C. Stotz, Arch., Monongahela Bank Bldg., to HERMAN BUHNER & CO., 202 Ninth St., Pittsburg, for erecting a 2-story addition to bottling plant for the Pittsburg Brewing Co. Cost, $40,000.

COATESVILLE, PA. — The Coatesville Foundry & Machine Co., Coatesville, which has purchased a tract of land just outside of the city limits, has let contract to the McCLINTIC-MARSHALL CONSTRUCTION CO., Park Bldg., Pittsburg, Pa., for the construction of buildings on the site, which will be equipped for the manufacture of boiler fronts and other castings, such as grate bars, etc. The buildings will be of structural steel and will include a main structure, 114 × 208 ft.; fireproof pattern shop, 40 × 60 ft.; pattern storage buildings, etc. The company expects to have the plant ready for operation in August.

FREDERICK, MD.—O'Brien Electric Light Co., 1710 Market St., Philadelphia, Pa., it is reported, will establish a plant at Frederick for manufacturing electric-light globes, to have output of 5,000 globes daily.

NEWPORT NEWS, VA.—The Hoy-Johnson Shoe Mfg. Co. has been formed and will erect a plant here, to employ 400 operatives. The officers are: John M. Hoy, Pres.; Everett Dufour, Vice-Pres.; Frank E. Johnson, Secy. and Treas. The board of directors is composed of the officers with the addition of E. L. McKeown.

PARKERSBURG, W. VA.—The Parkersburg Mill Co. will rebuild plant burned in December. The saw-mill building is to be of brick and concrete, two stories high, 40 × 20 ft.; planing mill of brick, three stories high, 64 × 100 ft., and power-house of brick, 40 × 40 ft. There will be three dry kilns.

ROUGEMONT, N. C.—See under Light and Power Plants.

HIGH POINT, N. C.—The stockholders of the Southern Car Co., High Point, have decided to rebuild the shops which were recently destroyed by fire. It is probable that the company will purchase considerable new machinery to replace that which was destroyed.

LAGRANGE, GA.—It is proposed to erect a cotton mill in Manchester, to cost about $500,000, for the Elm City Cotton Mills Co., Fuller E. Callaway, Lagrange, Treas.

ATLANTA, GA.—It is the intention of the Atlanta Hosiery Mills, 37 Gullatt St., to rebuild the plant here which has sustained a loss of about $400,000 by fire. Samuel A. Magill is Pres.

MONTGOMERY, ALA.—The National Compressed Air Power Co., H. C. Busby, Pres.; R. H. Bozeman, Vice-Pres.; H. C. Tolleson, Secy.-Treas., will erect a 2-story brick building and install machinery, at cost of $20,000, for building compressed-air engines for power purposes. The offices are at 522 First National Bank Bldg.

BOYCE, MISS.—H. C. Fonde will build a sawmill, with a daily capacity of 25,000 ft. of lumber. The mill building will be 25 × 125 ft.; dry kiln, 12 × 100 ft., and sheds, 50 × 60 ft.

LOUISVILLE, KY.—Eleven acres of ground on Floyd St., north of the Southern Ry., has been purchased by the Louisville Cotton Oil Co. and will be used as a site for a new cotton seed oil plant. The site is directly opposite from the present refinery of the Louisville Cotton Oil Co., and is adapted in every particular for the needs of the company. J. J. Caffrey, Pres. of the Louisville Cotton Oil Co., has announced that the ground was bought with the view of building a plant on it soon.

The Louisville Car Wheel Co., P. F. Green, Pres., has completed arrangements for proposed new plant, constructed of brick. The company has taken over six acres of land and buildings formerly occupied by Louisville Steam Forge Co.

SALEM, OHIO.—The National Sanitary Mfg. Co. has been incorporated with a capital of $200,000 by F. G. Borden, Edwin Baillie, S. Grove, Jr., D. W. Davis, E. E. Hanna and R. C. Kridler. It is the intention to erect a factory here. Edwin Baillie will be Gen. Mgr.

COLUMBUS, OHIO.—Plans for the construction of the proposed factory buildings of the Columbus Lithograph Co., to be located in East Fifth Ave., have been completed by D. Reibel & Sons, New First National Bank Bldg., Columbus, and figures are being prepared by contractors.

LAFAYETTE, IND.—Ground has been broken on Richards St. for the large proposed building which will be used by the Headson & Overesch Co. in the manufacture of the different compounds which are prepared by F. G. Headson. ADAM HERZOG & SON have the contract for constructing the new building and it will cost about $3,000. The building will be 146 ft. long and will have a concrete foundation. It will be lined on the outside with steel and will have a truss roof. It will be a 1-story structure and will have a floor space of 3,504 sq. ft.

WAKARUSA, IND.—It is stated that the Wakarusa Hoop Co. will erect a factory here, to manufacture hoops. Ellis L. Palmer is Agent.

INDIANAPOLIS, IND.—The Board of Public Works will receive bids for erection and equipment of a refrigerating plant at the City Hospital. All previous bids received were not opened. Joseph T. Elliott, Chn.

BUTLER, IND.—The Butler Basket Co. will soon ask for bids for the construction of a factory on the site of the plant recently destroyed by fire.

COLUMBUS, IND.—The DUNLAP CONTRACTING CO. has secured the contract to construct a factory to manufacture the Crump automobiles on Franklin St. Bids will be asked for equipment.

LAPEER, MICH.—Clark & Munger, Archs., Bay City, have prepared plans for a 2-story bakery building for the Home for the Feeble Minded and Epileptic, Lapeer.

PEORIA, ILL.—The feed building and engine house at the plant of the Woolner Distillery Co. will be rebuilt, it is stated, at a cost of $20,000. Adolph Woolner, Jr., is Mgr.

WAUPUN, WIS.—Regarding the proposed brick and stone twine plant for the State Prison, at Waupun, M. J. Tappins, Secy. State Bd. of Control, Madison, Wis., writes us that the plans are now being prepared for the shops and specifications are being prepared for the power machinery. Probably in about two or three weeks the Board will advertise for bids. Henry Town, Waupun, is Warden. Noted on March 12.

SALINA, KAN.—The Salina Foundry & Mfg. Co. will let contracts soon for erection of a 2-story building, 50 × 112 ft.

SPRINGVIEW, NEB.—The Springview Milling Co. has been formed for the purpose of erecting a flouring mill. Capital stock, $10,000. J. F. Carr is Pres.; E. H. Tisue, Vice-Pres.; H. L. Millay, Treas., and J. W. McLerin, Secy.

*FORT D. A. RUSSELL, WYO.—Bids are asked by Capt. V. K. Hart, Acting Q. M., U. S. A., in charge of construction, Cheyenne, Wyo., until 1.30 p. m., April 15, for constructing three double stable guard, saddler and farrier shops at this post.

KANSAS CITY, MO.—The National Paper Box Co. will occupy building to be erected by Maurice Berkowitz, 1918 Wyandotte St. The building will have five stories, mill-construction, 80 × 128 ft., reinforced footings, columns and girders for first and second floors, 12 × 16 freight elevator and will cost $45,000. Bids will be received in April. Clifton B. Sloan, 515 Hall Bldg., Kansas City, is Arch.

ALMA, ARK.—Alma Canning Co. is to erect a 60 × 120-ft. building at cost of $15,000 and will install machinery to cost $12,500. The daily capacity will be 75,000 cans of all products. William Chesterfield is Pres. and Mgr.

TAYLOR, TEX.—The Taylor Produce Co. will build an ice and cold storage plant. A brick building, 50 × 100 ft., with asbestos roof will be erected, containing four cold storage rooms, each 16 × 8 × 28 ft. inside. Cost, $15,000; contract for machinery awarded to the FRICK CO., of Waynesboro, Pa.

SHAWNEE, OKLA.—The Western Ice & Cold Storage Co. will erect an ice and cold storage plant, 50 × 125 ft., to cost $10,000. J. L. Bowman is the Engr.-in-Charge. E. W. Hill is Pres.; W. T. Leahy, Secy.

SPOKANE, WASH.—Arrangements have been completed by the Acme Engine Co. for enlarging the capacity of its shops on Madelia St. Added machinery will include a drop forging plant and modern machines. The company has a site in view for a factory which it is intended to erect after arrangements have been completed with the Ames Automatic Machinery Co. for a block of territory.

PORTLAND, ORE.—Schwarzchild & Sulzberger, packers, will build a $1,500,000 building in South Portland if the City Council will permit establishment inside of city limits. Ordinance will be presented to Council at once. The plant will be duplicate of one in Chicago. Machinery will be secured in the East.

MONTREAL, QUE.—We are officially advised that the American Can Co., 14th St. and Tenth Ave., New York, N. Y., will establish a plant here. The location has not been determined. The company will not employ an outside architect.

HAMILTON, ONT.—A company is being formed to build a brewery in this city at a cost of $250,000 and H. Bollinger, Fulton Bldg., Pittsburg, has been instructed to prepare plans.

WELLAND, ONT.—The Capital Lock-Nut & Washer Co., Fourth St., Columbus, Ohio, will take over the plant of the Robertson Machinery Co., and will expend $100,000 in improvements.

ST. BONIFACE, MAN.—Northwood, Noffke & Chickers, Northern Bank Bldg., Winnipeg, Man., have completed plans for the proposed plant to be erected in St. Boniface for the Manitoba Linseed Oil Mills Co., of Winnipeg, at a cost of $75,000. It is reported that bids for this work will be called for soon.

GRAND FORKS, B. C.—A roundhouse of 15 stalls to cost $70,000, a passenger station and office building to cost $49,000 and yard improvements to cost $40,000, are the improvements planned for this town by the Canadian Pacific Ry. Co. H. B. Walkem, Vancouver, B. C., is Res. Engr.

MISCELLANEOUS CONTRACTS.

(* *denotes that this work is advertised in Engineering News.*)

U. S. RECLAMATION SERVICE.—All news relative to canal projects, etc., will be found under Water Supply—Irrigation.

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*PANEL BOARDS AND BOXES.—Washington, D. C. See under Buildings.

TUNNEL.—Wardner, Idaho.—PHIL J. MYOTT has been awarded the contract by the Liston Mining Co. for the construction of 300 ft. of tunnel near Wardner.

HOSE.—New York, N. Y.—Bids are asked until 10.30 a. m., April 3, by Nicholas Hayes, Fire Comr., for furnishing and delivering 20,000 ft. of 3-in. rubber fire hose, 5-ply.

DREDGING.—Muskegon, Mich.—GREILING BROS., Green Bay, Wis., have been awarded the contract by the government for dredging in Muskegon Harbor, at about $35,000.

DRAINAGE DITCHES.—Fort Meade, S. Dak.—Bids are asked until April 10 by Capt. L. C. Scherer, Constr. Q. M., U. S. A., for constructing drainage ditches, bridges, culverts, etc.

DITCH.—Mankato, Minn.—Bids were received as follows, March 13, by Edw. Weaver, County Audr., for constructing Ditch No. 20: C. S. Erickson, of Mankato, at $4,900; Frank Reisenbigler, at $4,740.

DOCK.—Wyandotte, Mich.—A. J. DUPUIS CO., Detroit, Mich., have been awarded the contract by the Michigan Alkali Co. for constructing a dock, 1,500 ft. long and 43 ft. wide, at about $46,000.

PIPE.—Shreveport, La.—THE SOUTH CHESTER TUBE CO., Chester, has secured a contract for 30 miles 8-in. pipe to connect the Texarkana, Tex., oil field with this city at about $115,000.

WOODEN PIER.—Rye, N. Y.—Bids are asked until 4 p. m., April 7, by Charles S. Towle, Village Engr., 7 East 42d St., New York, for construction of a wooden pier or dock on Milton Creek, Rye.

DITCH.—Long Prairie, Minn.—The contract for constructing Judicial Ditch No. 5 has been awarded to GEORGE MOSHIER, Staples, Minn., at a cost of about $5,000. Walter Peltier is County Audr.

DRAIN.—Rockwell City, Iowa.—Bids are asked until noon, April 7, by the Board of Supervisors, Calhoun County, for the construction of a drain in Logan Township. B. E. Stonebraker is County Audr.

STONE.—Portland, Me.—Bids are asked by the Light-House Inspector until noon, April 6, for furnishing mooring stones for use in the Light-House District Nos. 1 for the fiscal year ending June 30, 1909.

*PIER, DREDGING.—Milwaukee, Wis.—Bids are asked by Maj. W. V. Judson, Corps Engrs., U. S. A., until 2 p. m., April 20, for building pile pier, removing old pier and dredging at Waukegan Harbor, Ill.

WHARF.—Fort Jackson, La.—John Reiss, 603 Hibernia Bank Bldg., New Orleans, La., submitted the lowest bid on March 12 for the construction of a wharf and causeway at Fort Jackson.

TOW BOATS.—Cincinnati, Ohio.—Bids are asked until 2 p. m., April 17, for hire of two tow boats having cylinders about 14 ins. diameter, with 5-ft. stroke, to serve as tenders for Ohio River dredges, during present season.

*WHARF.—Key West, Fla.—The lowest bid submitted on March 14 for the construction of a wharf at Fort Taylor was that of the Penn Bridge Co., Beaver Falls, Pa. Capt. Conrad H. Lanza is Q. M., U. S. A., Key West.

DITCH.—Greenville, Ohio.—Bids were received March 7 by James R. Marker, County Surv., for constructing Whitewater Joint County Ditch No. 572, in Harrison Township. The contract has been awarded to EZRA BAKER, Arcanum, Ohio, at $6,273.

*MONUMENT.—Charleston, S. C.—Bids are asked until noon, April 23, by Capt. E. T. Stuart, Corps Engrs., U. S. A., for furnishing materials and constructing monument on Kings Mountain Battlefield, York County, S. C.

REPAIRING STEAMBOAT.—New York, N. Y.—Bids are asked by Robt. W. Hebberd, Comr. of Public Charities, until 2:30 p. m., April 2, for furnishing all the labor and materials required to repair the steamboat "W. H. Wickham."

*LEDGE ROCK REMOVAL.—Newport, R. I.—Specifications for the removal of ledge rock from Newport Harbor and Sakonnet Harbor, R. I., are on file at the office of Engineering News, New York. Bids are asked until April 9.

DRAIN.—Rockwell City, Iowa.—The Supervisors of Sac and Calhoun counties have awarded the contract for the construction of a drain in District No. 7, Sac County, and No. 59, Calhoun County, to ANTON ORN, Sac City, Iowa, at $26,528.

DITCHES.—Pocahontas, Iowa—Bids are asked until April 7 at the office of J. A. Terry, County Audr., for constructing tile and open ditches in Drainage Improvement Districts Nos. 8, 13, 20, 28, 29, 32 and 34. Total estimated cost, $124,000.

RIPRAP.—Duluth, Minn.—Bids were received on March 16 by Maj. Braham D. Fitch, Corps Engrs., U. S. A., for placing about 2,660 tons of riprap at the Duluth Canal piers. The contract has been let to WHITNEY BROS. CO., Superior, Wis., at $3,990.

BUOYS.—Detroit, Mich.—Bids are asked by the Light-House Inspector, Detroit, Mich., until noon, March 30, for maintaining all the buoys now in Saginaw Bay and River, and in Portage Lake and River, Michigan, for the fiscal year ending June 30, 1909.

*CONCRETE SEA WALL.—Key West, Fla.—Bids are asked until 11 a. m., May 1, by Capt. C. H. Lanza, Q. M., for constructing at Fort Taylor, this city, a reinforced concrete sea wall about 2,200 ft. long; and for making a fill in rear of same about 250,000 cu. yds.

CANAL.—Klamath Falls, Ore.—Bids are asked until 2 p. m., April 1, by the United States Reclamation Service, Portland, Ore., for the construction of the South Branch canal, located about ten miles southeast of Klamath Falls, Ore., Klamath Project, Oregon-California.

ROPE, ETC.—New York, N. Y.—Bids are asked until noon, April 1, by Foster Crowell, Comr. Street Cleaning, for furnishing and delivering 205 coils long fiber pure manila hemp bolt rope; hose couplings and nozzles, and 275 pieces of ticking for saddle pads and horse collars.

AMBULANCE.—Hartford, Conn.—Bids are asked until 11 a. m., April 6, by James P. Berry, Secy. Bd. Contract and Supply, for the manufacture of a motor ambulance for the use of the city. The car is to be of the gasoline type, with 4-cylinder water cooled motor and to develop 30 HP.

*METAL WORK.—Wilmington, Del.—Bids are asked until 11 a. m., April 11, by the Light House Engr., Wilmington, for furnishing materials and labor of all kinds necessary for the completion and delivery of the metal work for the Bellevue Range Rear Light-Station, Deleware.

WIRE FENCE.—Edmonton, Alta.—Bids are asked until April 10, for the construction of a 70-mile wire fence around Buffalo Park, situated in Townships Nos. 42, 43 and 44, Ranges Nos. 6, 7, and 8, in the Province of Alberta. H. Douglas is Comr. of Dominion Parks, Edmonton.

*DREDGING.—New London, Conn.—Bids were opened on March 13 for dredging in Pawtucket River and Narragansett Bay, and the contract has been awarded by Maj. Harry Taylor, Corps Engrs., U. S. A., to the T. A. SCOTT CO., New London, Conn., at 21.25 cts. Full list of bidders noted March 19.

REPAIRING.—New York, N. Y.—Bids are asked by Allen N. Spooner, Comr. of Docks, until noon, April 2, for furnishing all the labor and materials required for repairing the municipal ferryboats or other floating ferry property of the department, and furnishing and delivering miscellaneous supplies.

CEMENT.—New York, N. Y.—The John P. Kane Co., 287 Fourth Ave., New York, submitted the lowest bid on March 19 to the Department of Parks for furnishing and delivering 100 bbls. Portland cement (No. 2, 1908) and for 200 bbls. Portland cement (No. 1, 1908), at $1.62 per bbl. for lot of 100 bbls. and lot of 200 bbls.

RETAINING WALL.—Toledo, Ohio—Bids are asked by the Board of Public Service, Reynold Voit, Secy., for furnishing material and constructing the piling and timbering work for a retaining wall to be built along the dock line of Swan Creek between the waters of said creek and the property leased from the State for workhouse purposes.

*DITCH.—Brainerd, Minn.—Bids were received by J. F. Smart, County Audr., March 18, for digging Ditch No. 14. Total length, 15 miles. Estimated quantity, 79,000 cu. yds. excavation. Estimated cost, 12½ cts. per cu. yd. Bids received were: Hackman & Wahl, St. Cloud, Minn, $10,603; Jacob R. Muhlick & Co., 100 East Van Buren St., Chicago, Ill., $9,174.

STEAM BOILER.—Key West, Fla.—The following are the lowest bids received on March 12, at the office of Capt. Conrad H. Lanza, Corps Engrs., U. S. A., for furnishing one steam boiler, 125 HP., with accessories, complete: (a) f. o. b. New York City; (b) f. o. b. Key West. National Dry Kiln Co., Indianapolis, Ind., (a) $2,700; Lombard Iron Works & Supply Co., (b) $1,033.

CONNECTING TUNNEL.—New York, N. Y.—Bids are asked until 3 p. m., April 2, by John W. Brannan, Pres. Bd. Trustees of Bellevue and Allied Hospitals, for all the labor and materials required for a tunnel connecting the Training School for Women Nurses with Pavilions A and B of the new Bellevue Hospital, situated under 26th St., east of First Ave., Borough of Manhattan, the City of New York.

HOSE.—Hartford, Conn.—Bids are asked by the Board of Contract and Supply until 11 a. m., March 30, for supplying the Fire Department with 3,000 ft. of 2½-in. heavy, double knit jacket seamless rubber lined hose, fitted with 3-in. or 2½-in. couplings at the option of the city, warranted to stand a pressure of 500 lbs. and to last under ordinary fire usage for a period of five years. McIntyre couplings preferred.

DREDGING.—New York, N. Y.—Bids were received on March 20 by Allen N. Spooner, Comr. of Docks, for dredging about 150,000 cu. yds. on the East and Harlem rivers, Boros. of Manhattan, Brooklyn, Queens and The Bronx, and in the Borough of Richmond. The bidders were: P. Sanford Ross, 277 Washington St., Jersey City, N. J., 26.9 cts. cu. yd.; R. G. Packard & Co., 130 Pearl St., New York, 20⅞ cts.

BREAKWATER.—Toronto, Ont.—Bids are asked by Fred Celinas, Secy. Dept. of Public Works, Ottawa, Ont., until April 24, for the construction of an extension to the breakwater on the south shore of Toronto Island, in the County of York, Ont., according to plan and specification to be seen at the offices of J. G. Sing, Resident Engr., Confederation Life Bldg., Toronto; Charles Desjardins, Clerk of Works, Postoffice Bldg., Montreal, and at the Department of Public Works, Ottawa.

DITCH.—Hampton, Iowa.—Bids were received by Frank G. Luke, County Audr., on March 20, for constructing an open ditch and tile drain in Scott-Hamilton Dist. No. 3, requiring about 5,372 ft. tile ranging from 14 to 24 ins., and 141,520 cu. yds. excavation. Also open ditch in Morgan and Oakland Drainage Dist. No. 2; about 98,983 cu. yds. excavation. The contract for excavation was awarded to the WEST BEND DRAINAGE CO., West Bend, Iowa, at 7⅝ cts. per cu. yd. Bids for tile drain were rejected.

DAM.—Harrisburg, Pa.—The following bids were opened on March 13 by the Board of Public Works for the construction of the Wildwood park dam: Ferro-Concrete Construction Co., Harrisburg, $112,332; McCormick & Co., Philadelphia, Pa., $115,054; Antonio Cocco, Philadelphia, Pa., $160,008; Henry & William Opperman, Harrisburg, Pa., $161,988; United Ice & Coal Co., Harrisburg, Pa., $124,748; Blackstaff Engineering Co., Philadelphia, Pa., $159,418; Charles A. Sims, Philadelphia, Pa., $143,217; Thiele Construction Co., Johnstown, Pa., $178,808; Bunting Construction Co., Flushing, L. I., N. Y., $149,818.

BULKHEAD.—Newport, Ore.—Bids are asked by A. H. Hampton, Recdr., until March 28, for construction of a cement and wood bulkhead at foot of Fall St., to be 3 ft. wide at base, 4 ft. high above beach level; bedrock to be leveled off and wall cemented at least 3 ins. below surface of bedrock; top of wall to be 18 ins. wide., with 1-in. drift bolts in cement every 3 ft., to which is fastened a wooden superstructure 50 ins. high and 8 ins. wide, well tied to the bank. It is to be built of new material 2 × 8 ins. with ten degree slant toward the street, lower part of the wall to be of good cement or concrete one part cement and remainder one part sand and two parts crushed rock. Length of wall to be 78 ft.

ROCK AND BRUSH.—Dubuque, Iowa.—Bids were received on March 7 by the Corps Engineers, U. S. A., for furnishing on United States barges, 40,000 cu. yds. brush and 25,000 cu. yds. of rock, and the following contracts were awarded: For brush: CURTI & PENCHI, Genoa, Wis., 18,000 cu. yds. at 16½ cts. per cu. yd., $2,970; JOHN E. ROBINSON, Stoddard, Wis., 7,000 cu. yds. at 17¾ cts. per cu. yd., $1,242; UMBARGER BROS., Genoa, Wis., 15,000 cu. yds. at 17 cts. per cu. yd., $2,550; for rock: H. L. STARR, Cassville, Wis., 5,000 cu. yds. at 67 cts. per cu. yd., $3,350; THOMAS WELSH, Potosi, Wis., 10,000 cu. yds. at 66 cts. per cu. yd., $6,600; E. P. SAWYER, North Buena Vista, Ia., 5,000 cu. yds. at 66½ cts. per cu. yd., $3,325; CHARLES PAPE, Waupeton, Ia., 5,000 cu. yds. at 61 cts. per cu. yd., $3,050.

BARGE CANAL.—Albany, N. Y.—Bids are asked by F. C. Stevens, Supt. Public Works, until noon, April 21, on three additional Barge Canal contracts, as follows: Contract No. 20, Erie canal, sections 2 and 3, for dredging a channel in the Mohawk River and performing work incidental thereto between Rexford Flats and Mindenville; length, 53.7 miles. Engineer's estimate, $3,480,000. Contract No 45, Erie canal, section 6, for the construction of a dam in the Oneida River at Caughdenoy and of Lock No. 24 and appertaining structures at Baldwinsville, Onondaga County; length, .55 miles. Engineer's estimate, $425,000. Contract No. 64, Erie canal, section 10, for the improvement of the Erie canal from west end of Contract No. 9, Orleans County, to 100 feet east of Gasport bridge, excepting the Oak Orchard Creek crossing; length, 10.988 miles. Engineer's estimate, $1,306,000.

BASEBALL PARK.—Philadelphia, Pa.—A baseball park is to be constructed upon a lot 481.3 × 520 ft., bounded by Lehigh Ave., Somerset, 20th and 21st Sts., for the American League. It is intended to construct grandstands 77 ft. deep, as follows: 251 ft. on Lehigh Ave.; 251 ft. on 21st St.; two tiers of seats; capacity, 10,000 people. Bleacher on Lehigh Ave., 210 × 82 ft. deep; 6,000 people, seated. Bleacher on 21st St., 248 × 82 ft. deep; 7,000 people, seated. The entrance to grand-stand and both bleachers on corner of 21st St. and Lehigh Ave., where a tower 24 ft. in diameter will form the main feature of the grand-stand. In this tower are also the general offices. The bleachers constructed entirely of reinforced concrete. Grand-stand, first tier of seats, are to be of reinforced concrete, above this, structural steel fireproofed. Cost, about $300,000. WILLIAM STEELE & SONS CO., 1600 Arch St., Philadelphia, are Engrs. and constructors.

RIVER IMPROVEMENTS.—Albany, N. Y.—The River Front Commission, of Albany, N. Y., has just made its report to the Mayor of the city, Hon. Charles H. Gaus, regarding the conditions along the Hudson River front, and makes many recommendations as to the details of the improvements. Two years ago the Legislature conveyed to the city the title to the Albany basin, formerly used as the terminal of the Erie Canal, and at the same time the city was given authority to construct a concrete bulkhead through the center line of the basin, from Columbia St., south, and to fill in the portion between the city and such bulkhead. The River Front Commission was appointed by the Mayor for the purpose of making a study of the needs of the city along the river front and to report its recommendations. The Commission reports that it is in favor of carrying out the project of constructing the bulkhead, but recommends that as large a portion of the basin as possible be preserved. The following recommendations are also made: The construction of a concrete dock wall; that the entire dock front should be acquired by the city at an estimated cost of $222,800, and also, all the property, not now owned by the city, between Madison Ave., Broadway, the Rensselaer bridge and Quay St., should be acquired, making the total price of purchases, as recommended, $279,475; that when this latter property should be acquired, the concrete park now on the river front and known as "Riverside Park," should be extended from Madison Ave. to the Rensselaer bridge, and John and Bleecker Sts. closed; that the river in front of Riverside Park should be dredged to a sufficient depth to permit of the docking of vessels; that a building be erected at the intersection of Hodge and Quay Sts. to be used as a terminal for trolley cars; that the Steamboat Square be improved and a large terminal for the use of the steamboat lines be constructed; that the piers in front of the city be acquired and cleared of the buildings now situated there, and the surface of the piers raised and proper docking facilities afforded; that a bridge be constructed from State St. over the railroad track and over the basin to the State St. pier. George D. Babbitt is Chn. of the Commission; Walter Melius is City Engr.

U. S. POSSESSIONS AND CUBA.

ENGINEERING SUPPLIES.—Panama.—The Isthmian Canal Commission, Washington, D. C., has awarded contracts as follows: 2,200 gross tons 70-lb. steel rails, to R. C. HOFFMAN & CO., Baltimore, Md., at $68,200; 660,000 ft. B. M. yellow pine, long leaf, lumber, to SOUTHERN SAWMILL CO., Hennen Bldg., New Orleans, at $19,902.

STEEL RAILS, ETC.—Panama.—Bids are asked until April 3 by the Isthmian Canal Commission, Col. H. F. Hodges, Corps Engrs., U. S. A., Gen. Purchasing Officer, Washington, D. C., for steel rails, angle bars, track spikes and bolts, frogs, switches, switch stands, etc.

PIPE.—Panama.—Bids were received March 23 at the office of the Isthmian Canal Commission, Washington, D. C., for (a) 58,000 ft. galvanized iron pipe, 2½ to 6 ins.; and 83,500 ft. black-iron pipe, ¼ to 12 ins.; (b) 48,400 ft. extra-strong w.-i. pipe; Central Metal & Supply Co., Baltimore, (a) $28,737; Cuyler & Mohler, Baltimore, (a) $31,909, (b) part, $20,620; E. F. Keating Co., New York, (b) $19,474; Mark Mfg. Co., Box G, Chicago, (a) $28,570, (b) $21,967; Pancoast, Rogers & Richards, 28 Platt St., New York, (a) $29,996, (b) $21,937; U. S. Steel Products Export Co., 24 State St., New York, (a) $27,854, (b) $25,606; Youngstown Sheet & Tube Co., Youngstown, Ohio, (a) $26,793, $26,328, (b) $18,835.

DREDGE.—Alaska.—The directors of the Nome Gold Dredging & Power Co. have awarded the contract for building a dredge to EDWARD L. SMITH, of New York. This dredge will be installed on the company's property on the Stewart River, near Nome, Alaska, as soon as possible, and will cost $135,000. Mr. Smith will also erect the company's water-power and electric generating plant, at a cost of $70,000. The dredge will be 113 ft. long by 40 ft. beam, and is built to dig to a depth of 45 ft. The bucket chain will be 98 ft. from tumbler to tumbler; will contain 42 buckets of the open-connected type, each with a capacity of half a cubic yard. The machine will dig, when running to its full capacity, seven cubic yards per minute, and its sluicing system will have the same capacity. It will be electrically driven, each operation governed by a separate motor.

ENGINE AND GENERATOR.—Panama.—Bids were received as follows March 14, by the Isthmian Canal Commission, Washington, D. C., for furnishing one cross-compound, four-valve Corliss non-condensing engine, (a), direct-connected to a 400-KW., three-phase, 2,300-volt generator: Ball Engine Co., Arcade Bldg., Philadelphia, (a) $10,500. Crocker-Wheeler Co., Ampere, N. J., (b) $6,600, $5,550, $5,100, $4,600. G. & W. Mfg. Co., 26 Cortlandt St., New York, (a) $16,400, $11,875. General Electric Co., Schenectady, N. Y., (a), $12,300; (b) $7,000, $4,845. Manning, Maxwell & Moore, 85 Liberty St., New York, (a) and (b) $20,575. Macintosh, Seymour & Co., 26 Cortlandt St., New York, (a) $15,900, $12,700. Motley, Green & Co., 66 Broad St., New York, (a) $12,550, $13,550 $14,700; (b) $6,930, $5,827, $5,355, $4,830. Phoenix Iron Co., Meadville, Pa., (a) $8,000. Providence Engine Works, 50 Church St., New York, (a) $14,400, $11,300, $13,900. Western Electric Co., 463 West St., New York, (a) $15,439; (b) $62,420, $5,145. Westinghouse Electric & Mfg. Co., Continental Trust Bldg., Baltimore, (a) $11,025, $13,792, $14,374, $12,328, $13,470; (b) $5,350, $6,850.

CONTRACT PRICES.

SEWER SYSTEM.—Seattle, Wash.—One bid was received, on March 21, by the Board of Public Works for the construction of the Green Lake branch of the North Trunk sewer system of this city. It was submitted by Grant Smith & Co., Seattle:

Fixed estimate	$1,500.00
795 lin. ft. 36-in. brick sewer	9.74
795 lin. ft. 36-in. concrete sewer (alternative)	9.45
3721 lin. ft. 42-in. brick sewer	13.75
3721 lin. ft. 42-in. concrete sewer (alternative)	13.26
558 lin. ft. 48-in. brick sewer	15.15
558 lin. ft. 48-in. concrete sewer (alternative)	14.90
5159 lin. ft. 54-in. brick sewer	16.88
5159 lin. ft. 54-in. concrete sewer (alternative)	16.58
336 lin. ft. 72-in. brick sewer	21.60
336 lin. ft. 72-in. concrete sewer (alternative)	21.25
1174 lin. ft. 84-in. brick sewer	31.81
1174 lin. ft. 84-in. concrete sewer (alternative)	31.46
4230 lin. ft. 90-in. brick sewer	32.88
4230 lin. ft. 90-in. concrete sewer (alternative)	32.50
3307 lin. ft. 90-in. brick sewer, brick invert	32.88
3307 lin. ft. 90-in. concrete sewer, brick invert (alternative)	32.88
108 lin. ft. 96-in. brick sewer, brick invert	34.98
108 lin. ft. 96-in. concrete sewer, brick invert (alternative)	34.98
127 lin. ft. 126-in. brick sewer, brick invert	45.30
127 lin. ft. 126-in. concrete sewer brick invert (alternative)	45.30
6877 lin. ft. 138-in. brick sewer, brick invert	44.39
6877 lin. ft. 138-in. concrete sewer, brick invert (alternative)	44.39
3559 lin. ft. 72-in. brick and concrete tunnel	27.40
75 manholes	90.00
400 lin. ft. manholes, extra depth	7.00
1 junction chamber	2,450.00
1 stormwater overflow	6,500.00
1 sandcatcher, including manhole	2,100.00
500 side connections, 6-in	.90
300 cu. yds. concrete, 1:12	11.00
2,000 cu. yds. concrete, 1:8	12.00
10,000 lin. ft. sub-drain, 8-in	.80
20,000 lbs. extra steel	.08
Total brick	$931,462
Total concrete	926,254

Readers' Wants

If you are in the market for material, equipment or supplies, and fail to find it in our advertising pages, send us full particulars, and we will gladly put you in touch with the right parties.

LOCOMOTIVES.—Poteau, Okla.—Jas. W. Beebe, Poteau, Okla., advises us that he wishes information concerning rack, cog and gear locomotives for logging purposes.

STREET SWEEPERS.—Pittsburg, Pa.—We are advised by Chas. E. Daugherty, 138 Bricelyn St., Pittsburg, Pa., that he wishes to learn of companies manufacturing street sweepers.

STEAM SHOVEL.—Grand Rapids, Mich.—John J. Hawes, Engr., Grand Rapids, Mich., writes us that he desires to communicate with manufacturers of small steam shovels which could be used for digging cellars in sandy country.

SHOE LACE MACHINERY.—Cawnpore, India.—We are in receipt of advices from Chheda Lall, Proprietor Merchant Press, Cawnpore, India, stating that he desires to communicate with American manufacturers of machinery to make shoe laces.

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CIVIL SERVICE EXAMINATIONS.

ASSISTANT IN GRAIN STANDARDIZATION.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on April 22 to fill vacancies as they may occur in the position of assistant in grain standardization (male), Bureau of Plant Industry, Department of Agriculture, at salaries ranging from $1,000 to $1,800 a year. Age limit, 20 years. Application Form 304.

JUNIOR ENGINEER, ASSISTANT ENGINEER.—Washington, D. C.—An examination is announced by the U. S. Civil Service Commission on April 15-16, to secure eligibles from which to make certification to fill vacancies as they may occur in the positions of junior engineer and assistant engineer in the Reclamation Service. Age limit, assistant engineer, 25 to 45 years; salary, $1,500 a year. Junior engineer, age limit, 20 to 45 years, salary, $720 a year.

MARINE STEAM ENGINEER.—Seattle, Wash.—An examination will be held on April 8 by U. S. Civil Service Commission to fill a vacancy in the position of marine engineer, $840 a year, Signal Service at Large, cable ship Burnside, Seattle, Wash., and vacancies requiring similar qualifications as they may occur. No educational test will be given, and it will not be necessary for applicants to appear at any place for examination. Age limit, 20 years. Application Form 1093.

ARCHITECTURAL AND STRUCTURAL STEEL DRAFTSMAN.—Tompkinsville, N. Y.—The U. S. Civil Service Commission announces an examination on April 8 to secure eligibles from which to make certification to fill a vacancy in the position of draftsman, $100 a month, in the office of the Engineer of the Third Light-House District, Tompkinsville, N. Y., and vacancies requiring similar qualifications as they may occur in any branch of the service. Age limit, 18 years. Application Form 1312.

APPRENTICE.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on May 6 to fill vacancies as they may occur in the position of apprentice in the Mint and Assay service at Philadelphia, Pa., New Orleans, La., Denver, Colo., and San Francisco, Cal., at salary as follows: First year $3.50, second year $4 and third year $4.50 a day. Age limit, 18 to 24 years, inclusive. Applications will be accepted only from graduates in metallurgy or mechanical engineering, and in chemistry, from technical schools of recognized standing, or from those who are soon to be such graduates. Application Form 304 and special form.

SCIENTIFIC ASSISTANT.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on April 15-16, to secure eligibles from which to make certification to fill vacancies as they may occur in the position of scientific assistant in the Department of Agriculture, at salaries ranging from $840 to $2,000 a year, depending upon the experience and qualifications of appointees. As a result of this examination certification will be made to fill the following-named vacancies: Scientific assistant in plant breeding, $1,400 a year, Bureau of Plant Industry (experience in corn breeding in semi-arid or arid regions). Scientific assistant in soil bacteriology, $1,400 a year, Bureau of Plant Industry. Age limit, 20 years. Application Form 1312.

ENGINEERS, ETC.—Albany, N. Y.—The State Civil Service Commission will hold examinations on April 18 for the following positions: Assistant to Chief Engineer, Public Service Commission, First District, $3,000; Assistant Civil Engineer, State Engineer's Dept., $5 to $6 a day; Civil Engineering Draftsman, $4 to $5 a day; Examiners in English and Sciences, Education Dept., $720 to $900; also for temporary summer employment at $60 to $100 a month; Inspector of Conduits, Public Service Commission, First District, $1,200; Mechanical Engineer, Public Service Commission, Second District, $1,200. The last day for filing applications for these positions is April 11. Full information and application forms for any of these examinations may be obtained by addressing Charles S. Fowler, Chief Examiner, Albany.

BLACKSMITH.—Browning, Mont.—An examination will be held by the U. S. Civil Service Commission on April 29 to secure eligibles from which to make certification to the position of blacksmith, $720 a year, Blackfeet Agency, Mont., and vacancies requiring similar qualifications as they may occur. Attention is invited to the fact that applications for the position of blacksmith may be filed at any time, but only those properly executed and filed, in complete form, with the U. S. Civil Service Commission, Washington, D. C., prior to the hour of closing business on April [illegible], 1908, will be considered for the specific vacancy mentioned. Each applicant should attach to his application a statement concerning the number in his family and the number that will require accommodations at the Indian school or agency in case the applicant receives appointment. No educational test will be given, and it will not be necessary for applicants to appear at any place for examination. Age limit, 20 years. Application Form, 1093.

MAGNETIC OBSERVER.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on April 29 to fill at least three vacancies in the position of magnetic observer (temporary) in the Coast and Geodetic Survey, and vacancies requiring similar qualifications as they may occur. The salaries will range from $60 to $75 a month, according to the character of the work and the qualifications of the applicant, and in exceptional cases where the person employed has had repeated experience in magnetic work, the salary may reach $100 a month. Appointments to permanent positions are made from the examination for laboratory assistant in the Bureau of Standards. Persons are desired who have had experience in a university or college as professor, assistant professor, teacher, or tutor in physics or allied sciences; or persons who have taken post-graduate degrees in physics or allied sciences; or students who have had not less than two years' work in physics or allied sciences, including laboratory practice. There will be no educational examination for these positions, but applicants will be rated upon their physical qualifications, training, experience, and references as set forth by them in Form 1312. Age limit, 20 to 45 years on the date of the examination.

LAY SANITARY INSPECTOR.—New York, N. Y.—Following are the first 25 candidates upon the eligible list for the position of lay sanitary inspector, examination held Oct. 28. Isaac L. Dunn (veteran), 172 West 130th St., 84.70; John E. Sayles (veteran), 160 Waverley Pl., 77.5; William P. Whyland, 211 West 107th St., 90.40; George L. Hoag, 326 60th St., Brooklyn, 88.80; Joseph S. Byrne, 2112 East 14th St., Sheepshead Bay, Brooklyn, 88.60; John J. Halley (N. Q.), 540 West 29th St., 87.80; Bernard J. Healy, 207 East 73d St., 86.80; Herman Koogh Vander, 255 Halsey St., Brooklyn, 86.70; Paul Stern (N. Q.), 811 Freeman St., The Bronx, 86.30; Howard A. Butler, 351 West 114th St., 85.40; John G. Gaynor, 235 East 50th St., 85.00; Conrad C. Sofleiss, Prospect Pl., Richmond Hill, L. I., 84.70; Joseph M. Lonergan, 937 Lafayette Ave., Brooklyn, 84.50; George A. Boyd (N. Q.), 29 West 129th St., 84.40; Harry T. Lungren, 509 West 140th St., 84.00; Solomon S. Leff, 350 East Fourth St., 83.80; Martin Joyce, 1054 Park Ave., 83.70; George F. Hertel, 2999 Perry Ave., The Bronx, 83.20; Matthew F. Greene, 430 West 42d St., 83.20; Moses I. Siegel, 117 Hart St., Brooklyn, 83.10; Max Whitelaw, 26 East 116th St., 83.00; Charles T. York, 34 Leroy St., 82.80; Alphonsus Donohue, 439 West 34th St., 82.80; Joseph P. Doyle, 138 West 62d St., 82.00; Henry Zlot, 58 East 114th St., 81.50.

ENGINEER.—Arizona—An examination will be held by the U. S. Civil Service Commission on April 15 to secure eligibles from which to make certification to fill a vacancy in the position of engineer (with knowledge of ice machinery, pumping, and electrical plants), $900 a year, Indian Service, Colorado River Agency, Ariz., and vacancies as they may occur in the Indian Service. For the specific vacancy indicated above, examination in steam, electrical and heating engineering is required. Owing to the widely varying conditions in the various schools and agencies of the Indian Service, general engineering examinations will be given under the following separate branches. An applicant may take one or more than one of these in his discretion. The prospects of appointment will be increased by successfully passing more than one of the branches indicated. Applicants should fully indicate in their applications the particular branch or branches in which they desire to be examined, and should state as definitely as possible the experience they have had which would tend to qualify them in the branches selected. Salaries, $480 to $1,000 a year. The majority of the appointments, however, are made at salaries of $720, $840 and $900 a year. Age limit, 20 years or over on the date of the examination. Application Form 1093, only one form being required in case more than one branch is selected. Two days will be required in case more than three branches are taken.

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INDUSTRIAL NOTES.

THE STANDARD BRIDGE TOOL CO., Pittsburg, Pa., advises that, to accommodate its constantly increasing business, larger quarters have been taken in the Curry Bldg., Fourth and Ross Sts., Pittsburg.

THE YOUNGSTOWN CAR MFG. CO., Youngstown, Ohio, builders of wood and steel cars for industrial service, announce that Parker V. P. Dodge, Pittsburg representative of the manufacturing company, is now permanently located at 406 House Bldg., Pittsburg, Pa.

THE NEW YORK CENTRAL & HUDSON RIVER R. R. CO. has awarded to the American Locomotive Co. of Schenectady the contract for the building of 148 locomotives of various types, at a cost approximately of $2,500,000. The locomotives will be built at the Schenectady works. The order is said to include 20 Pacific type passenger engines, 45 consolidation freight, 29 switching engines for use on the main line, and 12 electrical engines. On the Boston & Albany road, 12 passenger engines, 20 consolidation freights and 10 switching engines of the new lot ordered will be used.

In addition to the above, the company has also contracted for the delivery of 24,000 tons of steel rails for the lines east of Buffalo. George W. Kittredge, Grand Central Station, New York, is Ch. Engr. of the Company.

THE ROAD AND TRACK SUPPLY ASSOCIATION elected officers as follows at the meeting held in Chicago last week (in connection with the exhibits at the annual convention of the Railway Engineering and Maintenance-of-Way Association): President, George Stanton, Cleveland Frog & Crossing Co., Cleveland, O.; Vice-President, W. F. Schleiter, Dilworth, Porter & Co., Pittsburg, Pa.; Secretary and Treasurer, John N. Reynolds, the Wilson Co., Chicago.

AFTER APRIL 1, on account of the possibility of confusion arising from the fact that the name of the American Concrete Steel Co., of Detroit, Mich., is similar to that of a construction company whose home office is in New Jersey (of which the American Concrete Steel Co. had no knowledge at the time of its incorporation) this company has decided to make a change in its name from that of the American Concrete Steel Co. to the Maxwell Concrete Steel Co. Home office is in the Penobscot Bldg., Detroit.

THE EXPANDED METAL & CORRUGATED BAR CO., St. Louis, Mo., advises that among the larger orders recently placed with the company the following are noted: Philippine Government at Manila, 500 tons corrugated bars for use on the island, purchased through Paul S. Carter, P. A., New York. Hiram Lloyd Contr. & Bldg. Co., contractor for a new high school in St. Louis, 500 tons corrugated bars. Wm. A. Engeman, contractor for reinforced concrete retaining wall to be built at St. George Ferry Landing, Staten Island, N. Y., as part of plan for municipal improvements of Borough of Richmond; 600 tons corrugated bars.

THE DUQUESNE STEEL FOUNDRY, which operates a large plant in the Pittsburg district, in January decided to adopt the gas power system to operate the works formerly driven by steam. The initial equipment will consist of a 400-HP. (max.) Westinghouse gas engine of the three-cylinder vertical enclosed type, direct connected to a 240-KW. generator which will serve the various motor drives around the plant. The plant will operate on natural gas, which is available in large quantities in the Pittsburg district for power as well as lighting, at such low rates as to render gas power the cheapest form of power available in this section of the country.

THE WESTINGHOUSE ELECTRIC & MFG. CO. has recently completed the installation of a large number of motors for the San Rafael Paper Mfg. Co. of Mexico. These motors vary in capacity from 10 to 150 HP. They will be used in the operation of several machines and tools in the factory of the San Rafael Co., which is located about 36 miles from the City of Mexico. The company obtains its electric current for driving the motors from the Mexico Light & Power Co. at a potential of 20,000 volts. Six 120-KW. oil insulated transformers reduce this current to a working pressure of 440 volts. A switchboard to control the various transformers and motor circuits is furnished with the contract as well as a number of individual switchboard panels located near each motor. This installation is considered the most modern and economical plant of its kind in the Republic of Mexico.

THE MANAGEMENT of the Weber Steel Concrete Chimney Co. of Chicago announces that, owing to increasing its field of activity in taking on other kinds of plain and reinforced concrete construction work, in addition to chimneys, it has been decided to change the name of the company. Hereafter it will be known as The Weber Company, with general offices, as before, at 929-934 Marquette Building, Chicago. The company is now prepared to carry out contracts for all kinds of concrete and reinforced work, including foundations, walls, buildings, sewers, chimneys, etc., and already have some large contracts in these different lines under construction. The Weber Company now has branch offices in the following cities: New York, Atlanta, Cincinnati, St. Louis, Houston, Memphis, Minneapolis, Denver, Salt Lake City, Los Angeles, San Francisco, Seattle. Foreign offices: London, England, Paris, France, Halle a/S, Germany.

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TRADE PUBLICATIONS.

DRAWING INSTRUMENTS.—Theo. Alteneder & Sons, Philadelphia, 21st Edition. 5¼ × 8 ins.; pp. 109; illustrated.

This is the latest edition of the descriptive catalog of the well-known instrument maker.

BELT CONVEYORS.—The Jeffrey Mfg. Co., Columbus, O. 6 × 9 ins.; p. 48; illustrated.

The application of the rubber belt conveyor to all kinds of industrial plants is well illustrated in this pamphlet.

METAL DOORS.—Dahlstrom Metallic Door Co., Jamestown, N. Y. 11 × 14 ins.; pp. 32; illustrated.

The present catalog gives numbered drawings of the many moldings which this company makes for metal doors and entries.

WATER STERILIZER.—The Forbes Co., Philadelphia, Pa. Paper; 3¼ × 6¼ ins.; pp. 16; illustrated.

This apparatus for sterilizing drinking water was described in Engineering News of Oct. 31, 1907.

MECHANICAL DRAFT.—Green Fuel Economizer Co., Matteawan, N. Y. Bulletin 108. Paper; 6 × 9 ins.

Mechanical draft for boiler plants with and without economizers is described in a very general way.

CORLISS ENGINES.—Murray Iron Works Co., Burlington, Iowa. Paper; 10 × 6½ ins.; pp. 24; illustrated.

The proper nomenclature of all parts of Corliss engines made by this firm are shown by line drawings.

STEAM TURBINES.—De Laval Steam Turbine Co., Trenton, N. J. Bulletin 501. Paper; 7 × 4½ ins.; pp. 30; illustrated.

De Lavel Turbines for driving dynamos, blowers and centrifugal pumps are described and illustrated.

WATER TUBE BOILERS.—Murray Iron Works, Burlington, Iowa. Catalog 60. Paper; 12 × 9 ins.; pp. 40; illustrated.

This company's design of boiler, with longitudinal drums, sheet steel headers and straight tubes, is pictured and described.

STEEL.—Park Drop Forge Co., Cleveland, Ohio. "Short Stories About Steel." Paper; 4½ × 6¾ ins.; illustrated.

In a series of pamphlets to be issued from time to time this concern will outline the story of the advances in making iron and steel.

STEAM SPECIALTIES.—Strong, Carlisle & Hammond Co., Cleveland, O. Paper; 6 × 9 ins.

Special auxiliary apparatus, for steam plants, such as feed-water heater controllers, pump governors, traps, reducing and regulating valves are described.

TUNGSTEN LAMPS.—National Electric Lamp Association (Engineering Department), Cleveland, O. Paper; 6 × 9 ins.; pp. 14; illustrated.

This bulletin gives a description of the tungsten lamp and its characteristics, together with tables of cost and efficiency.

WIRE JOINTS.—Railway Specialty & Supply Co., Chicago, Ill. Paper; 6 × 9 ins.; pp. 4; illustrated.

These "Rapid" pin and block joints are intended as substitutes for the ordinary soldered joints in electric wires for signaling and other work.

PAINTS FOR METAL WORK.—Wadsworth-Howland Co., Chicago. Paper; 5½ × 8 ins.; pp. 4; illustrated.

The company's carburet black is a preservative paint for steel bridges, bridge floors, cars, etc., and is said to be proof against both rusting and acid corrosion.

ROAD GRADING MACHINE.—The Baker Mfg. Co., Chicago. Paper; 6 × 6¼ ins.; pp. 4; illustrated.

The "20th Century" grader is a light-weight machine handled by two to four horses. It can be used for street and ditch work, leveling fields for irrigation, and a variety of other purposes.

CEMENT.—The Edison Portland Cement Co., New Village, N. J. 11 × 8 ins.; pp. 64; illustrated.

The plant of the Edison Portland Cement Co. is described and illustrated in this catalog, together with many buildings in which the cement there made is used.

CONTRACTORS.—The Ley Construction Co., Springfield, Mass. 4½ × 9½ ins.; pp. 20; illustrated.

The title of this booklet explains its contents: "Views of Some of the Work Done by the Ley Construction Co. and Fred T. Ley & Co., Inc." Most of the work is concrete construction.

GEARS.—Frank Burgess, Norfolk Downs, Mass. Catalog E1. Paper; 3½ × 6 ins.; pp. 88; illustrated.

This pamphlet gives a great amount of condensed data on spur, bevel, miter, internal, worm and spiral gears of all materials, and on chains, bearings, couplings, etc.

CLAMPS FOR CONCRETE MOLDS.—J. H. Sullivan, 99 Norris Block, Grand Rapids, Mich. Paper; 2 circulars; 8½ × 11 ins.; illustrated.

These sheets illustrate clamps which avoid the use of nails or bolts in erecting forms for concrete wall, thus avoiding injury to the timber.

SPIRAL RIVETED PIPE.—American Spiral Pipe Works, P. O. Box 485, Chicago, Ill. Paper; 8 × 10 ins.; pp. 16; illustrated.

Spiral riveted pipe for power plants, hydraulic mining, refrigerating plants, etc., is described and illustrated. Several pages show forged steel fittings for such pipes.

GAS AND GASOLINE ENGINES.—Jacobson Machine Mfg. Co., D. B. Hoffer & Sons, Representatives, Reading, Pa. Bulletin F. Paper; 9 × 6 ins.; pp. 16; illustrated.

The various parts of a line of small internal combustion engines, from 3 to 35-HP., are described. These engines are "hit and miss" types for farm and portable installations.

HOISTING MACHINERY.—Mead-Morrison Mfg. Co., Cambridge, Mass. Catalog "E 1907." 6 × 9 ins.; pp. 156; illustrated.

This is a sized and listed catalog of all sorts of hoisting machinery for quarrymen, bridge builders, railroad, dock, sewer and subway construction, dredging, logging, hauling and erecting.

PAVING.—Hassam Paving Co., Worcester, Mass. 9 × 6 ins.; pp. 28; illustrated.

The Hassam pavement is a patented concrete construction which has been used with considerable success in many cities of the country. Views are shown in this pamphlet of several examples of its use.

CONCRETE PILES.—Raymond Concrete Pile Co., New York City. 7 × 10 ins.; pp. 11; illustrated.

This is a reprint of an article written by Walter Mueller and published in the "Record and Guide" of New York. It is entitled "The Concrete Pile Foundations for the New Hospital Buildings at Ellis Island."

BOILER-ROOM PRACTICE.—Lake Erie Boiler Compound Co., Buffalo, N. Y. "Scalology." Paper; 6 × 8¾ ins.; pp. 26; illustrated.

This new "house organ" is started with the expressed purpose of giving out interesting information on engine and boiler-room practice. There is the usual amount of lighter-vein matter.

RAILWAY DITCHING MACHINE.—The Browning Engineering Co., Cleveland, Ohio. Paper; 6 × 9 ins.; pp. 8; illustrated.

This machine resembles a locomotive crane adapted to travel along the cars of a work train, and having a dipper arm and bucket carried by the boom, and portable track is laid for the machine.

VOLUTE CENTRIFUGAL PUMPS.—Lawrence Machine Co., 40 Island St., Lawrence, Mass. Bulletin 13. Paper; 6 × 9 ins.; pp. 16; illustrated.

Beside some description of construction details of the Lawrence volute pump, there is much general information on friction losses, capacity and power requirements, weights and dimensions, fittings, etc.

HIGH-DEGREE VACUUM APPARATUS.—Alberger Condenser Co., 95 Liberty St., New York.

Dry vacuum pumps, condensers, cooling towers, heaters, etc., for use in connection with evaporating apparatus for the manufacture of sugar, glue, glycerine, condensed milk, etc., etc., are described and their particular functions noted.

STEEL TIRES.—Standard Steel Works Co., Philadelphia, Pa. Paper; 9 × 6 ins.; pp. 38; illustrated.

This is a reprint of a paper read before the Western Railway Club by Mr. Geo. L. Norris, on "Courses of Defects and Failures in Steel Tires." It is illustrated by views of flaws and etched cross-sections of tires showing the character of the metal.

CONCRETE AND EARTH MOVING MACHINERY.—Chicago Concrete Machinery Co., 20 South Canal St., Chicago, Ill. 6 × 9½ ins.; pp. 48; illustrated.

This is an illustrated and dimensioned catalog of concrete mixers, concrete elevators, friction hoists, wheelbarrows, concrete carts, rock crushers, dump boxes, grading machines and similar machines for concrete work.

AIR DRILLS.—The C. T. Carnahan Mfg. Co., 36th and Wazee Sts., Denver, Colo. 7 × 10 ins.; pp. 40; illustrated.

There is in this 1908 edition of the regular catalog issued by this company a complete description of the Murphy air hammer rock drills and accessories, embracing in their design and application the Carnahan system of breaking rock.

CEMENT.—Coplay Cement Co., 517 Pennsylvania Bldg., Philadelphia, Pa. 6 × 9½ ins.; pp. 14; illustrated.

The cement manufactured by this company, called "Saylor's Portland Cement," is claimed by them to have been the first Portland cement made in this country. They show in this pamphlet some of the recent work in which it has been used.

ELECTRIC RAILWAY AND LIGHTING PROPERTIES.—Stone & Webster, 147 Milk St., Boston, Mass. Leather; 5 × 7½ ins.; pp. 63; illustrated.

This company constructs and manages street railways all over the country and annually issues a statement, such as the above, giving the location, description and financial condition of the various properties.

METAL FORMS.—The Duralite Co., 42 Broadway, New York City. 6 × 9½ ins.; pp. 11; illustrated.

Duralite is a metal forming to be used for centering for brick or concrete construction. It consists of two outside layers of sheet metal joined by an intermediate truss-like web of corrugated metal. It can be bent into arch centering to great advantage.

RECORDING WATER LEVEL GAGE.—The Bristol Co., Waterbury, Conn. Paper; 8 × 11 ins.; pp. 12; illustrated.

In this device a double bell casting is fixed at the desired minimum water level. A diaphragm of thin sheet rubber is placed between the halves of the bell, so that the water pressure below compresses the air above. The air thus compressed is transmitted through a flexible copper tube to the recorder, which may be located at any convenient distance from the water and may be equipped with daily or weekly charts. The recorders have also been developed for use in oil storage tanks. The recorders for either water or oil may be made to indicate either depth or volume.

DREDGES.—Atlantic Equipment Co., 111 Broadway, New York City, 9 × 6 ins.; pp. 48; illustrated.

The pamphlet contains a chapter to each type of dredge which the company is prepared to build; the dipper, the elevator, the hydraulic and the gold dredge. These machines are built after the designs of Mr. A. W. Robinson, M. Am. Soc. C. E.

STEAM HEATING APPARATUS.—Warren Webster & Co., Camden, N. J. Part 5, General Catalog. Paper; 6 × 9 ins.; pp. 32; illustrated.

This catalog describes a system of steam heating in which several specialties made by this concern are to be used, notably oil and air separators, feed-water heater, grease traps, vacuum pumps and automatic valves of several kinds.

CONCRETE FOR RESIDENCES.—Vulcanite Portland Cement Co., Fuller Bldg., New York City. Vulcanite pamphlet No. 8. 6 × 9½ ins.; pp. 16; illustrated.

Mr. Alfred Moyer, Assoc. Am. Soc. C. E., describes in this pamphlet a residence recently erected mainly of concrete, at South Orange, N. J., in which a remarkably artistic effect was gained by a judicious use of selected aggregates in the exposed concrete.

ASHPITS FOR LOCOMOTIVES.—W. B. Ord, McAdam, N. B., Canada. Paper; 6 × 8¾ ins.; pp. 4; illustrated.

In the Ord ashpit the cinders are discharged into steel buckets under the engine track; the pit is wide enough to allow of their being wheeled out on lateral tracks. They are then hoisted and dumped by a revolving pneumatic crane. The system is in use on the Canadian Pacific Ry. and Intercolonial Ry.

PYROMETERS.—Chas. Engelhard, 41 Cortlandt St., New York City. Paper; 6 × 9 ins.; pp. 56; illustrated.

The major part of this pamphlet consists of testimonials and recommendations from users of the Le Chatelier pyrometer as made by the W. C. Heraeus Platinum Works of Germany. There is, however, a description of the apparatus and several pages of melting points, tempering heats, etc.

PUMPING MACHINERY.—Blake & Knowles Steam Pump Works, 118 Liberty St., New York. Catalogs K-800 and B-808. Paper; 6 × 9 ins.; illustrated.

K-800 gives tabulated data on the Knowles pumps of all varieties; boiler, tank service, mining, steam and motor driven, etc. Similar information is included on air compressors, condensers, air pumps, feed-water heaters, and pump fittings.

B-808 is a list of parts of Blake pumps.

WATER STERILIZERS.—Forbes Co., Philadelphia, Pa. Paper; 6 × 9 ins.; pp. 16; illustrated.

The Forbes water sterilizer was described at great length in Engineering News of Oct. 31, 1907. The pamphlet before us presents various quotations in support of the desirability of securing pure water, and also in support of the claims of the Forbes water sterilizer as a means to that end. Illustrations and text are used to describe the Forbes apparatus.

LOCOMOTIVES.—Baldwin Locomotive Works, Philadelphia, Pa. Paper; 9 × 6 ins.; pp. 32; illustrated.

This bulletin (No. 64) deals with locomotives built by this firm for the Central Ry. of Brazil, beginning with three engines in 1862, and aggregating 296 at the end of 1907, in which latter year 15 locomotives were delivered. The several classes of engines are described, showing the developments in design and size.

TRENCH EXCAVATOR.—Geo. W. Parsons Co., Newton, Ia.; Geo. F. Lambert, Observatory Building, Des Moines, Ia. Paper; 5½ × 8 ins.; pp. 16; illustrated.

In the Parsons machine, the excavation is done by a chain of buckets, adjusted to any desired depth, and the material is delivered upon a lateral conveyor. The methods of operating are described, and the machine is shown at work on different contracts for trenches 5 ft. and 7½ ft. wide, 20 ft. deep. The frame which carries the buckets has a lateral travel so that any desired width of trench can be excavated.

WATER AND OIL JET APPARATUS.—Schutte & Koerting Co., Philadelphia, Pa. Catalogs 2 M, 4 Q, 60. Paper; 8 × 11 ins; pp. 12, 4 and 12; illustrated.

The first section named describes a water-jet for draining cellars, pits and pools; a water economizer for fountains; sand washing and ash removing apparatus.

The second named bulletin shows a water-jet apparatus for priming syphons, pumps, air vessels, etc.

The third section shows the design of a system of oil burners in which the oil is heated, under pressure, to a degree higher than atmospheric flash point and sprayed under the boiler.

HOLLOW TILE FIREPROOFING.—Henry Maurer & Son, 420 East 23d St., New York. 6 × 9 ins.; pp. 54; illustrated.

The title of the pamphlet is "Illustrated and Descriptive Catalog of the 'Herculean,' Flat Arch (Terra Cotta) and 'Phoenix' Hollow Wall Construction." The former of these two constructions is built of semi-porous terra-cotta, in blocks 12 × 12 ins. in plan and from 6 to 12 ins. in depth, reinforced with T-bars which are embedded between the blocks in cement mortar. The second of the above noted constructions is similar to the first except that the blocks are smaller so as to be suitable for walls and are reinforced with plates instead of T-bars.

HAMMER DRILLS.—Sullivan Machinery Co., Railway Exchange, Chicago. Paper; 6 × 9 ins.; pp. 12; illustrated.

This bulletin describes the Sullivan hammer drills for mining work, and also the hand drill for the same class of work. The company's 32-page bulletin for February also gives particulars of cost of such work. It also shows the use of channeling machines in quarries, diamond drills in the Mapimi copper mines (Mexico), rock drills in tunnels on the New York, New Haven & Hartford Ry., and mechanical conveyors for use in connection with coal mining machines.

GRADING MACHINES, SCRAPERS AND DUMP CARS.—Western Wheeled Scraper Co., Aurora, Ill. Paper; 9¾ × 6½ ins.; pp. 104; illustrated.

This is an illustrated catalog of a great variety of machines and appliances for the excavation and handling of material in construction and other work. Wheel and drag scrapers, grading plows, grading and ditching machines, dump cars of 3 to 18 yds. capacity, rotary dump cars and dump wagons are all shown in great variety. Among the specialties are rock crushing and handling plants for road and concrete work, and railway spreader cars for leveling material dumped for making banks.

CONCRETE MIXING, ROCK CRUSHING AND EARTH HANDLING MACHINERY.—Chicago Concrete Machinery Co., 20 South Canal St., Chicago. Paper; 6 × 9¼ ins.; pp. 48; illustrated.

The first part deals with portable and stationary concrete mixing plants with the Chicago drum mixer, charging hopper, etc., and a bucket elevator for carrying the concrete to the upper floors of a building and automatically discharging it into a receiving hopper fan while the wheelbarrows or carts are filled. The second part deals with rock crushing, screening and elevating machinery. The third part includes grading and road picking machines, and dump wagons. Other specialties are steel carts and wheelbarrows for handling concrete, and a corrugated metal culvert for roads. Several testimonials are given from users of the concrete mixers.

ELECTRICAL APPARATUS.—The General Electric Co., Schenectady, N. Y. Bulletins. Paper; 8 × 10½ ins.; illustrated.

Bulletin No. 4,544 describes the present design of switchboards for railway use. The various forms of apparatus used in connection with the panels, details of construction, etc., are described and illustrated. Complete tables of catalog numbers, capacities, etc., and dimension sketches, are given.

An artistic edition of Bulletin No. 4,548 illustrates typical examples of direct and alternating current motors, installed on a great variety of lathes, drills, grinders, punchers, shears, boring mills, and similar tools, which are suggestive of their adaptability to this character of service. A short description of typical motors, rheostats and controllers is followed by some 15 pp. of half-tone illustrations showing the motors installed on tools of various manufacturers, from small portable drills to heavy punches, boring mills and engine lathes.

In Bulletin 4,554 a line of portable indicating instruments is described. The voltmeters and wattmeters are constructed on the direct-reading dynameter principle, the ammeters on the well-known Thomson inclined coil principle. The pointer fluctuations are dampened by means of Foucault currents set up in a thin aluminum segment attached to the shaft. Mechanically, the instruments are strong and light, and of small size, so that several instruments may be carried with ease. Catalog numbers, capacities and list prices are given in the Bulletin, and full sized sample scales of the various instruments reproduced.

In Bulletin No. 4,555 the application of electricity to cement plants is described and much information is given regarding the different processes and the apparatus used. The bulletin suggests how general electric equipment will successfully meet the requirements. A list of cement plants using general electric apparatus gives a number of the equipments already installed.

A luminous arc rectifier system, described in Engineering News, Sept. 12, 1907, is shown by Bulletin 4,556. A partial list of equipments furnished by the General Electric Company gives an aggregate of over 12,000 lamps already installed.

This concern has designed a new line of cylinder controllers, with improved magnetic blowouts, which can be used on systems on which the voltage peaks reach 750 volts. At present three controllers known as the K-34, K-35 and K-36 are being built and are described in Bulletin No. 4,557. The K-34 controller is suitable for use with either two 150-HP. or four 75-HP. motors, the K-35 with either two 100-HP. or four 50-HP., and the K-36 with two motors only, each of 60 HP. or less. The K-34 and K-35 controllers are provided with bridge connections and maintain full current through all motors during the transition period from series to parallel, giving a smooth acceleration and reducing the strain on motors and gearing. A powerful magnetic field in the controller box is produced by means of individual blowout coils and arc chutes which insures the extinction of the arc under all operating conditions and reduces the burning and repairs to a minimum. The bulletin gives the details of construction and dimensions of the different controllers.

A standard line of switchboard panels has been designed for small isolated plants where conditions make it desirable to use a circuit breaker on the board in place of the combined lever-switch and fuse which has been generally used on this type of panel in the past. These are described in Bulletin 4,558. The panels provide for controlling 125-volt generators of from 5 to 120-KW. capacity, and 250-volt generators of from 10 to 240-KW. capacity, and are made for controlling from two to six feeder circuits. The equipment of feeder panels and the combination generator and feeder panels are described, details of the instruments, circuit breakers, switches, mounting of rheostats, etc., are given, and dimensioned drawings with diagrams of connections and tabulations of the various capacities are included.

In Bulletin 4,559 there are described lines of motor-starting rheostats and panels for direct-current installations. On these panels the terminals are few and simple, arranged to minimize trouble from bad connections. The starting rheostat on these panels is connected with a line switch and fuses or a double pole circuit breaker. Dimension diagrams are printed for different motor-capacity outfits.

The annual fan catalog of this company appears as Bulletin 4,560 in artistic form, shows the line of desk and column fans for alternating and direct current circuits.

Bulletin 4,562 describes a line of mill motors intended for use where heavy intermittent loads are thrown upon the driving machinery. They are suitable for rolling mills, hoists, turntables, conveying machinery, etc., and are made in two types, one for direct-current circuits and the other for alternating, designated as MD and MI respectively. Both types are built in sizes from 30 to 150-HP. The direct-current motors are wound as series, shunt or compound machines and the alternating-current motors are of a three-phase induction type with a polar-wound rotor connected to collector rings.

Bulletin 4,563 shows a new electric railway track switch indicator in a weatherproof case.

A line of centrifugal air compressors, developed by the General Electric Co., is described in Bulletin 4,564. These machines are similar to the well-known centrifugal pump in both appearance and operation, and consist essentially of a rotating impeller surrounded by a suitable casing with an intake opening at the center and a discharge opening at the circumference. The present designs are based on a series of experiments carried on for several years. Compressor sets are furnished driven by Curtis steam turbines, direct-current motors and induction motors. Among the industrial applications are mentioned foundry cupola service, for gas furnace service, where a constant pressure is maintained, and for exhauster service in sulphite pulp mills, chemical works, etc., where a small degree of vacuum is required. They can also be used for the ventilation of deep mine shafts, copper smelting industries, kilns, glass and bottle works and filtration and purification plants.

CATCH BASINS.—Hannagan Catch Basin Co., Lawrence, Mass. Paper; 6 × 9¼ ins.; pp. 32; illustrated.

The catch basin here described in detail is provided with specially designed removable iron cover which, with its setting, forms an inlet that makes unnecessary the cutting of a slot in the curbstone. The manhole is also equipped with a "cement valve, plug and bar." The so-called cement bar is made of reinforced concrete and supports a brick partition trap and also a cement valve. The latter is really a circular plug finished on its outlet side to fit a series of eccentric recesses, thus facilitating the removal of the plug from above by means of a lifting chain. By removing the plug and inserting a pipe connected with a hand pump, the water above the sediment in the catch basin can be discharged to the sewer, leaving only the solid matter to be removed from the catch basin. The trap is so designed, the pamphlet states, that the oil introduced to prevent the development of mosquitoes cannot be flushed out by every rainfall.

For other Proposal Advertisements see pages 47, 48, 49, 50, 54, of Advertisements and Construction News page 108.

WATER-WORKS.

Staatsburgh, N. Y.

Sealed proposals for a water-works plant for the Staatsburgh Water Company, under five separate divisions will be received at the office of Harry C. Barker, Attorney, No. 54 Market St., Poughkeepsie, up to 12 o'clock M., Saturday, April 4th, 1908. The division of work and materials to be furnished are approximately as follows:

1. A storage reservoir complete.
2. 4,500 feet riveted steel pipe.
3. 11,000 feet cast iron pipe.
4. Valves, gates and hydrants.
5. Trenching, setting valves, hydrants, etc.

All bids to be made out on blanks furnished by the engineer, and to be marked under seal: "Proposal for the Construction of Water-Works for the Staatsburgh Water Company," and directed to Harry C. Barker, 54 Market St., Poughkeepsie, N. Y.

Bidders may bid on as many divisions as they choose, but a certified check for $250.00 will be required under each division to insure the successful bidder will enter into his contract.

Plans and specifications are on file in the office of the engineer in charge, 54 Market Street, Poughkeepsie, N. Y., copies of which will be furnished on receipt of two dollars on application to the engineer.

The company reserves the right to reject any or all the bids submitted, or to accept any that may be advantageous to the company.

STAATSBURGH WATER CO.,
B. H. BREVOORT,
Engineer-in-Charge,
54 Market St., Poughkeepsie, N. Y.
13-1t

PUMPING ENGINE.

White Plains, N. Y.

Proposals will be received until 12.00 o'clock noon, April 17th, 1908, for one two million gallon triple expansion, direct acting condensing pumping engine erected complete on foundation in pumping station, Orchard Street, in the Village of White Plains, Westchester County, New York.

Specifications are on file in the office of the Board of Water Commissioners of the Village of White Plains, New York.

Copies of the same will be mailed on application.

A bond of one thousand dollars ($1,000.00) must accompany each bid.

The Board reserves the right to reject any or all bids.

By order of the Board of Water Commissioners,

JNO. N. HEENEY,
13-3t Superintendent.

INVITATION FOR BIDS FOR CAST IRON PIPE AND SPECIAL CASTINGS.—The Board of Public Works of Holyoke, Mass., will receive at its office in Holyoke, until 1.30 o'clock P. M., Friday, April 10, 1908, sealed bids for cast iron water pipe and special castings, so endorsed and addressed to the Chairman, and at the above time and place will publicly open and read the bids so received. Bidding blanks may be had upon application to the Board. Proposals must be accompanied by a certified bank check or lawful money to the order of the City of Holyoke, in the sum of Five Hundred Dollars ($500.00). The Board reserves the right to reject any or all bids or to accept any bid that in its opinion may be for the best interests of the City of Holyoke. OSCAR C. FERRY, Asst. Clerk. Holyoke, Mass., March 24, 1908. 13-1t

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STONE R[illegible]D.

[illegible]hold, N. J.

Sealed proposals to bu[illegible] Stone Road extending from the inter[illegible] of the Avenue of Two Rivers on the [illegible]on Road (in the Borough of Rumson [illegible] County of Monmouth, N. J.) to the [illegible]ght bridge, 4,041 feet in length, will [illegible]ived by the Board of Chosen Freehold[illegible] the County of Monmouth at the Cou[illegible]se in Freehold on the 13th day of [illegible] 1908, at 11 o'clock in the forenoon [illegible] and there publicly opened.

Specifications and all in[illegible]on relating to said construction may be [illegible] by applying to E. Everett Throckmorto[illegible] his office at Long Branch, N. J., or at [illegible] Freeholders' office in the Court House, [illegible]hold, N. J., or of George W. Patterson, Clerk of the Board of Freeholders, Ard[illegible] N. J.

Each bidder must accompa[illegible] his proposal with a certified check for o[illegible]sand dollars, payable to the Director [illegible] Board of Freeholders as a guarantee [illegible] work is awarded to him he will enter [illegible] a contract with said Board for the due [illegible] faithful performance of the work which contract must be executed, together with the Bond of the successful bidder within the [illegible] of twenty days from the time of award[illegible] the contract in the penal sum of at least [illegible] total estimated cost of the work, with two or more freeholders or a good and su[illegible]ent surety or trust company as sureties, [illegible] to be first duly approved by the Director of the Board of Chosen Freeholders and the State Commissioner of Public Roads and conditioned for the faithful performance of the work in strict conformity with the plans and specifications.

The Board reserves the right to reject any or all bids.

WILLIAM B. CONOVER,
Director.

Attest:
GEORGE W. PATTERSON, JR.,
Clerk of the Board.
Dated March 23d, 1908. 13-3t

REPAIRING ASPHALT STREETS.

Peoria, Ill.,

Sealed proposals will be received until two (2) o'clock P. M., Tuesday, April 14th, A. D. 1908, for repairing all Asphalt Streets (2,000 sq. yds. more or less) in the City of Peoria, Illinois.

Proposals must be made out upon blanks furnished at the Office of the City Engineer and be addressed to,

E. A. FURRY,
13-1t Commissioner of Public Works.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., March 21, 1908.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 4th day of May, 1908, and then opened for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of the U. S. Post Office at Bar Harbor, Maine, in accordance with drawings and specification, copies of which may be had from the Custodian of Site at Bar Harbor, Maine, or at this office, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 13-2t

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KEY WEST, FLA.—Sealed proposals, in trpilicate, will be received until 11 A. M., May 1st, 1908, for constructing at Fort Taylor, this city, a reinforced concrete sea-wall about 2,200 feet long; and for making a fill in rear of same about 250,000 cubic yards. Information furnished on request. Proposals should be marked "Proposals for Sea-Wall" or "Proposals for Fill" and addressed to CAPTAIN C. H. LANZA, Quartermaster. 13-5t

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U. S. ENGINEER OFFICE, Charleston, S. C., March 23, 1908.—Sealed proposals for furnishing materials and constructing monument on Kings Mountain Battlefield, York Co., S. C., will be received here until 12 noon, April 23, 1908, and then publicly opened. Information furnished on application. E. T. STUART, Capt., Engrs. 13-4t

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Situations Open

MECHANICAL ENGINEER WANTED—Must be a graduate of one of the Standard Technological Schools in Mechanical Engineering. Experienced in construction and operation and in estimating cost and supervising erection and assembling machinery. Of good executive ability, capable of exercising initiative in discovering defects, in improving methods and in determining upon new processes calculated to reduce cost of production. Must be energetic, tactful and resourceful, of sound character and absolute reliability. Must be financially able to invest from [illegible],000 to $25,000 in the company, upon satisfactory proof of the wisdom thereof. The person qualified to meet all of the above requirements will make no mistake in communicating at once, giving full particulars, with "Z. B. 13," Engineering News, New York. 13-1t